GenCore version 5.1.3

OM nucleic - nucleic search, using sw model

Run on: December 24, 2002, 16:23:56 ; Search time 206.404 Seconds
(without alignments)
13583.723 Million cell updates/sec

Title: US-09-708-724A-1
Perfect score: 1245
Sequence: 1 atgggaccctggtcagtggt.....ccaggaagcgggctgagtag 1245

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_101002:*
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23: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2001B.DAT:*
24: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
c	1	162.2	13.0	1872	24	ABL99794	Human secretory po
	2	160	12.9	143068	21	AAF21105	Human low adenosin
	3	160	12.9	143068	21	AAF21272	Human low adenosin
	4	160	12.9	143068	21	AAA34983	Human adenosine re
	5	160	12.9	143068	21	AAA35150	Human adenosine re
	6	160	12.9	143068	24	ABL68124	Ovary cancer relat
	7	160	12.9	149412	21	AAA35151	Human adenosine re
	8	160	12.9	152740	21	AAF21273	Human low adenosin
	9	159	12.8	369	23	AAS68798	DNA encoding novel
	10	159	12.8	401	22	ABA72549	Human foetal liver
	11	159	12.8	401	22	AAK20973	Human brain expres
	12	159	12.8	401	22	AAK47126	Human bone marrow
	13	159	12.8	401	22	AAI52962	Probe #21648 used
	14	159	12.8	401	24	ABS21353	Human genome-deriv
	15	159	12.8	552	22	ABA60008	Human foetal liver
	16	159	12.8	552	22	AAK08279	Human brain expres
	17	159	12.8	552	22	AAK34158	Human bone marrow
	18	159	12.8	552	22	AAI39881	Probe #8567 used t
	19	159	12.8	552	24	ABS08919	Human genome-deriv
	20	159	12.8	1002	23	AAS68799	DNA encoding novel
	21	159	12.8	1683	23	AAS85679	DNA encoding novel
	22	154.2	12.4	4977	22	AAS26628	Human genomic DNA
c	23	102.4	8.2	526	22	AAL35808	Human musculoskele
c	24	97.8	7.9	2212	23	AAS78334	DNA encoding novel
c	25	89.8	7.2	527	22	AAL35807	Human musculoskele
c	26	89.8	7.2	527	22	AAL35809	Human musculoskele
c	27	87	7.0	1019	22	AAH98277	Human EST-derived
	28	85.8	6.9	2750	21	AAC69110	Human secreted pro
	29	85.8	6.9	2752	21	AAC69119	Human secreted pro
	30	60	4.8	759	22	AAF68303	Human lung tumour
	31	60	4.8	759	24	ABK38214	cDNA encoding clon
	32	52	4.2	893	23	AAS65934	DNA encoding novel
	33	52	4.2	1503	23	AAS78107	DNA encoding novel
	34	51.2	4.1	514	22	ABA60429	Human foetal liver
	35	51.2	4.1	514	22	AAK08707	Human brain expres
	36	51.2	4.1	514	22	AAK34594	Human bone marrow
	37	51.2	4.1	514	22	AAI40313	Probe #8999 used t
c	38	44	3.5	77536	21	AAA14651	Nucleotide sequenc
	39	42.8	3.4	1026	23	AAS78332	DNA encoding novel
c	40	42.6	3.4	707	24	ABQ39154	Oligonucleotide fo
	41	42.6	3.4	707	24	ABQ39155	Oligonucleotide fo
	42	41.2	3.3	461	23	ABV33700	Human prostate exp
	43	41.2	3.3	461	23	ABV42603	Human prostate exp
	44	40.6	3.3	438	23	ABV03397	Human prostate exp
	45	40.6	3.3	1278	20	AAX90824	DNA encoding human

ALIGNMENTS

RESULT 1
ABL99794/c
ID ABL99794 standard; cDNA; 1872 BP.
XX
AC ABL99794;
XX
DT 03-OCT-2002 (first entry)
XX
DE Human secretory polynucleotide (sptm) 49.
XX
KW Human; ss; gene; secretory protein; secretory polynucleotides; SPTM;
KW SPTM-related disease; somatic gene therapy; germline gene therapy;
KW severe combined immunodeficiency; intracellular parasite protection;
KW fungal parasite; protozoan parasite; cell proliferative disorder; cancer;
KW immune disorder; AIDS; neurological disorder; Parkinson's disease;
KW motor neuron disorder; demyelinating disease; multiple sclerosis;
KW meningitis; abscess; prion diseases; cerebral palsy;
KW neuroskeletal disorder; peripheral nervous system disorder;
KW dermatomyositis; polymyositis; myopathy; myasthenia gravis;
KW mental disorder; Tourette's syndrome.
XX
OS Homo sapiens.
XX
PN WO200220756-A2.
XX
PD 14-MAR-2002.
XX
PF 30-AUG-2001; 2001WO-US27297.
XX
PR 05-SEP-2000; 2000US-229747P.
PR 05-SEP-2000; 2000US-229748P.
PR 05-SEP-2000; 2000US-229749P.

PR 05-SEP-2000; 2000US-229750P.
PR 05-SEP-2000; 2000US-229751P.
PR 05-SEP-2000; 2000US-230016P.
PR 05-SEP-2000; 2000US-230583P.
PR 06-SEP-2000; 2000US-230505P.
PR 06-SEP-2000; 2000US-230514P.
PR 06-SEP-2000; 2000US-230515P.
PR 06-SEP-2000; 2000US-230517P.
PR 06-SEP-2000; 2000US-230518P.
PR 06-SEP-2000; 2000US-230519P.
PR 06-SEP-2000; 2000US-230595P.
PR 06-SEP-2000; 2000US-230596P.
PR 06-SEP-2000; 2000US-230597P.
PR 06-SEP-2000; 2000US-230599P.
PR 06-SEP-2000; 2000US-230610P.
PR 06-SEP-2000; 2000US-230864P.
PR 06-SEP-2000; 2000US-230865P.
PR 06-SEP-2000; 2000US-230988P.
PR 06-SEP-2000; 2000US-230989P.
PR 06-SEP-2000; 2000US-230990P.
PR 07-SEP-2000; 2000US-230896P.
PR 07-SEP-2000; 2000US-230897P.
PR 07-SEP-2000; 2000US-230951P.
PR 07-SEP-2000; 2000US-231163P.
PR 07-SEP-2000; 2000US-231832P.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Stuart J, Lincoln SE, Altus CM, Dufour GE, Chalup MS, Hillman JL;
PI Jones AL, Yu JY, Wright RJ, Gietzen D, Liu TF, Yap PE, Dahl CR;
PI Momiyama MG, Bradley DL, Rohatgi SD, Harris B, Roseberry AM;
PI Gerstin EH, Peralta CH, David MH, Panzer SR, Flores V, Daffo A;
PI Marwaha R, Chen AJ, Chang SC, Au AP, Inman RR;
XX
DR WPI; 2002-315658/35.
DR P-PSDB; ABB97797.
XX
PT Polynucleotide sequences encoding human secretory proteins useful for
PT gene therapy of e.g. genetic deficiency disorders, cancers, and
PT diseases caused by intracellular parasites -
XX
PS Claim 1; Page 277-278; 585pp; English.
XX
CC The invention comprises the amino acid and coding sequences of human
CC secretory (SPTM) proteins. The SPTM DNA and amino acid sequences are
CC useful for treating a disease or condition associated with the expression
CC of functional SPTM. The SPTM DNA sequences are useful for somatic or
CC germline gene therapy to correct a genetic deficiency (e.g. severe
CC combined immunodeficiency). The SPTM DNA sequences are also useful in
CC providing protection against intracellular parasites (e.g. fungal
CC parasites and protozoan parasites). The SPTM DNA and protein sequences
CC are also useful for diagnosing cell proliferative disorders, cancer,
CC immune disorders (e.g. AIDS), neurological disorders (e.g. Parkinson's
CC disease), motor neuron disorders, demyelinating diseases (e.g. multiple
CC sclerosis), meningitis, abscesses, prion diseases, cerebral palsy,
CC neuroskeletal disorders, peripheral nervous system disorders,
CC dermatomyositis and polymyositis, myopathy, myasthenia gravis, and mental
CC disorders (e.g. Tourette's syndrome). cDNA sequences ABL99746 - ABL99929
CC represent human secretory polynucleotides of the invention.
XX
SQ Sequence 1872 BP; 463 A; 435 C; 400 G; 573 T; 1 other;

Query Match 13.0%; Score 162.2; DB 24; Length 1872;
Best Local Similarity 83.0%; Pred. No. 4.6e-35;
Matches 185; Conservative 0; Mismatches 38; Indels 0; Gaps 0;

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Qy    707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
          |||| ||| ||| | |||||||||||| ||||||| ||||||   || |  ||||| || |
Db    328 CTGAGTCTAAAAATCTGAAAGAATCTGTTGTCCCCCCCCACAGATCCAATTGAAAACAAAA 269

Qy    767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
          |||||||||||||||| ||||||||  | |||||||||||||||| |||| |||| |||
Db    268 AACAGGAGAGGGAGGATAAAAATTGGTTTTTACCACCCCCTCCAGTTGCAGCAACATCTG 209

Qy    827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
          ||||| |||||||||| |||||||||||||||| | ||||||||    |   |||||
Db    208 TACCACCTCCTTCAGTAGCAGAAATAGAGACCCCAGTACAAAGAATGTTACACTCTGCTG 149

Qy    887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTC 929
          ||||||||||||||||||||||| |||  ||||  |||||||
Db    148 CCATAGCTGGAGAGCCCTTAGGACCTTGTGCTTTTCCTATTTC 106
```

RESULT 2
AAF21105
ID AAF21105 standard; DNA; 143068 BP.
XX
AC AAF21105;
XX
DT 14-MAR-2001 (first entry)
XX
DE Human low adenosine antisense oligonucleotide related sequence #2672.
XX
KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200062736-A2.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US08020.
XX
PR 06-APR-1999; 99US-0127958.
XX
PA (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX
PI Nyce JW;
XX
DR WPI; 2000-679539/66.
XX
PT Low adenosine (A) content antisense oligonucleotides which do not
PT trigger adenosine receptors during metabolism, useful e.g. for treating
PT cancers and respiratory obstructions -
XX
PS Disclosure; Page 924-957; 1592pp; English.
XX
CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction

CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
CC and/or surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention.
XX
SQ Sequence 143068 BP; 41194 A; 30122 C; 32403 G; 39349 T; 0 other;

Query Match 12.9%; Score 160; DB 21; Length 143068;
Best Local Similarity 82.1%; Pred. No. 1.7e-33;
Matches 184; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
Db 21653 CTGAATCTAAAAATTGGAAAGAATTTGTTGTCCTACTCACAGCTCCAATTGAATATAAAA 21712

Qy 767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
Db 21713 AACAGGAGAGGGAGGATAAAAATTGGCCTATACCGCCTCCTCCAGATGCAGAAACATCTG 21772

Qy 827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
Db 21773 TACCATCTCCTTCAGTGGCAGAAATAGAGATCCCAGTACAAAGAATTTTATGCTCTGCTG 21832

Qy 887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTCT 930
Db 21833 TCATAGCTGGAGAGCCCTTAGGACCTTGTGCTTTTCCTATTTCT 21876

RESULT 3
AAF21272
ID AAF21272 standard; DNA; 143068 BP.
XX
AC AAF21272;
XX
DT 14-MAR-2001 (first entry)
XX
DE Human low adenosine antisense oligonucleotide related sequence #2839.
XX
KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200062736-A2.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US08020.
XX
PR 06-APR-1999; 99US-0127958.
XX
PA (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX
PI Nyce JW;
XX
DR WPI; 2000-679539/66.
XX
PT Low adenosine (A) content antisense oligonucleotides which do not
PT trigger adenosine receptors during metabolism, useful e.g. for treating
PT cancers and respiratory obstructions -
XX
PS Disclosure; Page 1186-1219; 1592pp; English.
XX
CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
CC and/or surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention.
XX
SQ Sequence 143068 BP; 41194 A; 30122 C; 32403 G; 39349 T; 0 other;

Query Match 12.9%; Score 160; DB 21; Length 143068;
Best Local Similarity 82.1%; Pred. No. 1.7e-33;
Matches 184; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
Db 21653 CTGAATCTAAAAATTGGAAAGAATTTGTTGTCCTACTCACAGCTCCAATTGAATATAAAA 21712

Qy 767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
Db 21713 AACAGGAGAGGGAGGATAAAAATTGGCCTATACCGCCTCCTCCAGATGCAGAAACATCTG 21772

Qy 827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
Db 21773 TACCATCTCCTTCAGTGGCAGAAATAGAGATCCCAGTACAAAGAATTTTATGCTCTGCTG 21832

Qy 887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTCT 930
Db 21833 TCATAGCTGGAGAGCCCTTAGGACCTTGTGCTTTTCCTATTTCT 21876

RESULT 4
AAA34983
ID AAA34983 standard; DNA; 143068 BP.
XX
AC AAA34983;
XX
DT 28-JUL-2000 (first entry)
XX
DE Human adenosine receptor related polynucleotide SEQ ID NO:2672.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;

```
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US17712.
XX
PR   03-AUG-1998;   98US-0095212.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstriction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers -
XX
PS   Disclosure; Page 851-882; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an
CC   antisense oligonucleotide (ON) with low adenosine (up to 15%), which
CC   targets nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
CC   asthma, impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of
CC   the ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last
CC   185 sequences are also called SEQ ID NO:1 to 185, but the sequences
CC   differ from the previously named sequences. SEQ ID NO:11 to 1680
CC   (AAA32323 to AAA33992) are specifically claimed ONs from the present
CC   invention. N.B. Sequences given in the disclosure of the present
CC   invention do not match up with their corresponding SEQ ID NO: sequences
CC   given in the sequence listing.
XX
SQ   Sequence 143068 BP; 41194 A; 30122 C; 32402 G; 39350 T; 0 other;

  Query Match            12.9%;  Score 160;  DB 21;  Length 143068;
  Best Local Similarity  82.1%;  Pred. No. 1.7e-33;
  Matches  184;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACACAACACCCAAAGAAAATAATA 766
           |||||||| ||| || |||||||| | |||||| || |||| | || |  ||| |||| |
Db   21653 CTGAATCTAAAAATTGGAAAGAATTTGTTGTCCTACTCACAGCTCCAATTGAATATAAAA 21712

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           |||||||||||||||| ||||||||| | |||| || ||||||| |||||||| |||
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Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
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           ||||||||||||||||||||||| ||| |||| ||||||||
Db   21833 TCATAGCTGGAGAGCCCTTAGGACCTTGTGCTTTTCCTATTTCT 21876


RESULT 5
AAA35150
ID   AAA35150 standard; DNA; 143068 BP.
XX
AC   AAA35150;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Human adenosine receptor related polynucleotide 2nd SEQ ID NO:24.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US17712.
XX
PR   03-AUG-1998;   98US-0095212.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstriction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers -
XX
PS   Disclosure; Page 1106-1138; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an
CC   antisense oligonucleotide.(ON) with low adenosine (up to 15%), which
CC   targets nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
CC   asthma, impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of
CC   the ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last
CC   185 sequences are also called SEQ ID NO:1 to 185, but the sequences
CC   differ from the previously named sequences. SEQ ID NO:11 to 1680
CC   (AAA32323 to AAA33992) are specifically claimed ONs from the present
CC   invention. N.B. Sequences given in the disclosure of the present
CC   invention do not match up with their corresponding SEQ ID NO: sequences
CC   given in the sequence listing.
XX
SQ   Sequence 143068 BP; 41194 A; 30126 C; 32402 G; 39346 T; 0 other;
```

```
  Query Match            12.9%;  Score 160;  DB 21;  Length 143068;
  Best Local Similarity  82.1%;  Pred. No. 1.7e-33;
  Matches  184;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
           |||||||| ||| || |||||||| | |||||| || |||| | || |  ||| |||| |
Db   21653 CTGAATCTAAAAATTGGAAAGAATTTGTTGTCCTACTCACAGCTCCAATTGAATATAAAA 21712

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           |||||||||||||||| ||||||||| | |||| || ||||||| |||||||||  ||| 
Db   21713 AACAGGAGAGGGAGGATAAAAATTGGCCTATACCGCCTCCTCCAGATGCAGAAACATCTG 21772

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           ||||||||||||||  |||||||||||| |||| | |||||||||    |  |||||
Db   21773 TACCATCTCCTTCAGTGGCAGAAATAGAGATCCCAGTACAAAGAATTTTATGCTCTGCTG 21832

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTCT 930
           |||||||||||||||||||||| |||  ||||  ||||||||
Db   21833 TCATAGCTGGAGAGCCCTTAGGACCTTGTGCTTTTCCTATTTCT 21876


RESULT 6
ABL68124
ID   ABL68124 standard; DNA; 143068 BP.
XX
AC   ABL68124;
XX
DT   15-MAY-2002  (first entry)
XX
DE   Ovary cancer related gene sequence SEQ ID NO:6461.
XX
KW   Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW   stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW   cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW   gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200194629-A2.
XX
PD   13-DEC-2001.
XX
PF   30-MAY-2001; 2001WO-US10838.
XX
PR   05-JUN-2000; 2000US-209473P.
PR   05-JUN-2000; 2000US-209531P.
PR   18-SEP-2000; 2000US-233133P.
PR   18-SEP-2000; 2000US-233617P.
PR   20-SEP-2000; 2000US-234009P.
PR   20-SEP-2000; 2000US-234034P.
PR   20-SEP-2000; 2000US-234052P.
PR   22-SEP-2000; 2000US-234509P.
PR   22-SEP-2000; 2000US-234567P.
PR   25-SEP-2000; 2000US-234923P.
PR   25-SEP-2000; 2000US-234924P.
PR   25-SEP-2000; 2000US-235077P.
PR   25-SEP-2000; 2000US-235082P.
PR   25-SEP-2000; 2000US-235134P.
PR   25-SEP-2000; 2000US-235280P.
PR   26-SEP-2000; 2000US-235637P.
PR   26-SEP-2000; 2000US-235638P.
PR   27-SEP-2000; 2000US-235711P.
PR   27-SEP-2000; 2000US-235720P.
PR   27-SEP-2000; 2000US-235840P.
PR   27-SEP-2000; 2000US-235863P.
PR   28-SEP-2000; 2000US-236028P.
PR   28-SEP-2000; 2000US-236032P.
PR   28-SEP-2000; 2000US-236033P.
PR   28-SEP-2000; 2000US-236034P.
PR   28-SEP-2000; 2000US-236109P.
PR   28-SEP-2000; 2000US-236111P.
PR   29-SEP-2000; 2000US-236842P.
PR   29-SEP-2000; 2000US-236891P.
PR   02-OCT-2000; 2000US-237172P.
PR   02-OCT-2000; 2000US-237173P.
PR   02-OCT-2000; 2000US-237278P.
PR   02-OCT-2000; 2000US-237294P.
PR   02-OCT-2000; 2000US-237295P.
PR   02-OCT-2000; 2000US-237316P.
PR   03-OCT-2000; 2000US-237425P.
PR   03-OCT-2000; 2000US-237598P.
PR   03-OCT-2000; 2000US-237604P.
PR   03-OCT-2000; 2000US-237606P.
PR   03-OCT-2000; 2000US-237608P.
PR   01-NOV-2000; 2000US-244867P.
PR   01-NOV-2000; 2000US-245084P.
XX
PA   (AVAL-) AVALON PHARM.
XX
PI   Young PE,  Augustus M,  Carter KC,  Ebner R,  Endress G,  Horrigan S;
PI   Soppet DR,  Weaver Z;
XX
DR   WPI; 2002-188264/24.
XX
PT   Screening for anti-neoplastic agent involves exposing cells to a
PT   chemical agent to be tested for anti-neoplastic activity, and
PT   determining a change in expression of a gene of a signature gene set  -
XX
PS   Claim 1; SEQ ID 6461; 44pp; English.
XX
CC   The present invention describes a method (M1) for screening for an
CC   anti-neoplastic agent. The method involves exposing cells to a chemical
CC   agent to be tested for anti-neoplastic activity, determining a change in
CC   expression of at least one gene (I) of a signature gene set, where (I)
CC   comprises a sequence (S) selected from 8447 sequences (given in ABL61664
CC   to ABL70110), or is at least 95% identical to (S), where a change in
CC   expression is indicative of anti-neoplastic activity. (I) has cytostatic
CC   activity and can be used in gene therapy. M1 can be used for screening
CC   an anti-neoplastic agent, and can be used for producing a product which
CC   is the data collected with respect to the anti-neoplastic agent as a
CC   result of M1, and the data is sufficient to convey the chemical
CC   structure and/or properties of the agent. M1 can be used in the
CC   treatment of cancer such as colon, breast, stomach, lung, thyroid,
CC   oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC   adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
CC   infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
CC   carcinoma, papillary carcinoma and Wilm's tumour.
XX
SQ   Sequence 143068 BP; 41194 A; 30122 C; 32403 G; 39349 T; 0 other;

  Query Match            12.9%;  Score 160;  DB 24;  Length 143068;
  Best Local Similarity  82.1%;  Pred. No. 1.7e-33;
  Matches  184;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
           |||||||| ||| || |||||||| | |||||| || |||| | || |  ||| |||| |
Db   21653 CTGAATCTAAAAATTGGAAAGAATTTGTTGTCCTACTCACAGCTCCAATTGAATATAAAA 21712

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           |||||||||||||||| ||||||||| | |||| || ||||||| |||||||||  ||| 
Db   21713 AACAGGAGAGGGAGGATAAAAATTGGCCTATACCGCCTCCTCCAGATGCAGAAACATCTG 21772

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           ||||||||||||||  |||||||||||| |||| | |||||||||    |  |||||
Db   21773 TACCATCTCCTTCAGTGGCAGAAATAGAGATCCCAGTACAAAGAATTTTATGCTCTGCTG 21832

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTCT 930
           |||||||||||||||||||||| |||  ||||  ||||||||
Db   21833 TCATAGCTGGAGAGCCCTTAGGACCTTGTGCTTTTCCTATTTCT 21876


RESULT 7
AAA35151
ID   AAA35151 standard; DNA; 149412 BP.
XX
AC   AAA35151;
```

```
XX
DT   28-JUL-2000  (first entry)
XX
DE   Human adenosine receptor related polynucleotide 2nd SEQ ID NO:25.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US17712.
XX
PR   03-AUG-1998;   98US-0095212.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstriction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers -
XX
PS   Disclosure; Page 1138-1171; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an
CC   antisense oligonucleotide (ON) with low adenosine (up to 15%), which
CC   targets nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
CC   asthma, impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of
CC   the ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last
CC   185 sequences are also called SEQ ID NO:1 to 185, but the sequences
CC   differ from the previously named sequences. SEQ ID NO:11 to 1680
CC   (AAA32323 to AAA33992) are specifically claimed ONs from the present
CC   invention. N.B. Sequences given in the disclosure of the present
CC   invention do not match up with their corresponding SEQ ID NO: sequences
CC   given in the sequence listing.
XX
SQ   Sequence 149412 BP; 43049 A; 31388 C; 33852 G; 41123 T; 0 other;

  Query Match           12.9%;  Score 160;  DB 21;  Length 149412;
  Best Local Similarity  82.1%;  Pred. No. 1.8e-33;
  Matches  184;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
           |||||||| ||| || |||||||| | |||||| || |||| | || |  ||| |||| |
Db   27997 CTGAATCTAAAAATTGGAAAGAATTTGTTGTCCTACTCACAGCTCCAATTGAATATAAAA 28056

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           |||||||||||||||| ||||||||| | |||| || |||||||  |||||||| |||
Db   28057 AACAGGAGAGGGAGGATAAAAATTGGCCTATACCGCCTCCTCCAGATGCAGAAACATCTG 28116

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           ||||||||||||||| |||||||||||| |||| | |||||||||    |  |||||
Db   28117 TACCATCTCCTTCAGTGGCAGAAATAGAGATCCCAGTACAAAGAATTTTATGCTCTGCTG 28176

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTCT 930
           ||||||||||||||||||||||| |||  ||||  ||||||||
Db   28177 TCATAGCTGGAGAGCCCTTAGGACCTTGTGCTTTTCCTATTTCT 28220


RESULT 8
AAF21273
ID   AAF21273 standard; DNA; 152740 BP.
XX
AC   AAF21273;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human low adenosine antisense oligonucleotide related sequence #2840.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US08020.
XX
PR   06-APR-1999;   99US-0127958.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not
PT   trigger adenosine receptors during metabolism, useful e.g. for treating
PT   cancers and respiratory obstructions -
XX
PS   Disclosure; Page 1219-1254; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
CC   chemokines, endogenously produced specific and non-specific enzymes,
CC   binding proteins, adhesion molecules and their receptors, cytokine and
CC   chemokine receptors, adenosine receptors, bradykinin receptors, central
CC   nervous system (CNS) and peripheral nervous and non-nervous system
CC   receptors, CNS and peripheral nervous and non-nervous system peptide
CC   transmitters, defensins, growth factors, vasoactive peptides and
```

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CC   receptors, binding proteins and malignancy associated proteins. The
CC   antisense oligonucleotides may be used in this way to treat disorders
CC   including respiratory obstruction (especially pulmonary obstruction
CC   and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
CC   and/or surfactant hypoproduction which are associated with a disease or
CC   condition selected from pulmonary vasoconstriction, inflammation,
CC   allergies, asthma, impeded respiration, respiratory distress syndrome
CC   (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC   pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC   fragments and antisense oligonucleotides used in the exemplification of
CC   the present invention.
XX
SQ   Sequence 152740 BP; 44169 A; 32023 C; 34549 G; 41999 T; 0 other;

  Query Match             12.9%;  Score 160;  DB 21;  Length 152740;
  Best Local Similarity   82.1%;  Pred. No. 1.8e-33;
  Matches  184;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
           |||||||| ||| || |||||||| | |||||| || |||| | || |  ||| |||| |
Db   27997 CTGAATCTAAAAATTGGAAAGAATTTGTTGTCCTACTCACAGCTCCAATTGAATATAAAA 28056

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           |||||||||||||||| ||||||||| | |||| || |||||||  ||||||||| |||
Db   28057 AACAGGAGAGGGAGGATAAAAATTGGCCTATACCGCCTCCTCCAGATGCAGAAACATCTG 28116

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           ||||||||||||||||  |||||||||||| |||| | |||||||||    |  |||||
Db   28117 TACCATCTCCTTCAGTGGCAGAAATAGAGATCCCAGTACAAAGAATTTTATGCTCTGCTG 28176

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTCT 930
           |||||||||||||||||||||||| |||  ||||  ||||||||
Db   28177 TCATAGCTGGAGAGCCCTTAGGACCTTGTGCTTTTCCTATTTCT 28220


RESULT 9
AAS68798
ID   AAS68798 standard; cDNA; 369 BP.
XX
AC   AAS68798;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #4602.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG04611.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity  -
XX
PS   Claim 1; SEQ ID No 4602; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 369 BP; 112 A; 92 C; 64 G; 101 T; 0 other;

  Query Match             12.8%;  Score 159;  DB 23;  Length 369;
  Best Local Similarity   82.1%;  Pred. No. 1.6e-34;
  Matches  183;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
           |||| ||| ||| | |||||||||| |||||||||||||| | || |  |||||||| |
Db      99 CTGAGTCTAAAAATCTGAAAGAATCTGTTGTCCCACCCACAGCGCCAACTGAAAATAAAA 158

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           |||||| |||||||||| |||||||| | |||| || |||||| | |||||||||  |||
Db     159 AACAGGTGAGGGAGGATAAAAATTGGCCTATACCGCCTCCTCCAATCGCAGAAACATCTG 218

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           |||   |||||||||||| ||||||||||||||||    |||| || |    |  |||||
Db     219 TACTGCCTCCTTCAGTAGCAGAAATAGAGACCCCAAAACAAACAACTTTATGCTCTGCTG 278

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTC 929
           |||||||||||| ||||||||||  |||||||||  |||||||
Db     279 CCATAGCTGGAGAACCCTTAGGACCTTGCACTTTTCCTATTTC 321


RESULT 10
ABA72549
ID   ABA72549 standard; DNA; 401 BP.
XX
AC   ABA72549;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Human foetal liver single exon nucleic acid probe #20854.
XX
KW   Human; foetal liver; gene expression; single exon nucleic acid probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157277-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00669.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
```

PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-483447/52.
XX
PT Human genome-derived single exon nucleic acid probes useful for
PT analyzing gene expression in human fetal liver -
XX
PS Claim 4; SEQ ID NO 20854; 639pp + sequence listing; English.
XX
CC The invention relates to a single exon nucleic acid probe for
CC measuring human gene expression in a sample derived from human foetal
CC liver. The single exon nucleic acid probes may be used for predicting,
CC measuring and displaying gene expression in samples derived from human
CC fetal liver. The present sequence is a single exon nucleic acid
CC probe of the invention.
CC Note: The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 401 BP; 115 A; 92 C; 87 G; 107 T; 0 other;

Query Match 12.8%; Score 159; DB 22; Length 401;
Best Local Similarity 82.1%; Pred. No. 1.7e-34;
Matches 183; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

```
Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACACAACACCCAAAGAAAATAATA 766
           |||| ||| ||| | |||||||||||| ||||||||||||||| |  | |  |||||||| |
Db     161 CTGAGTCTAAAAATCTGAAAGAATCTGTTGTCCCACCCACAGCTTCAATTGAAAATAAAA 220

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           |||||||||||||||| ||||||||| | |||  || |||||||| ||||||||| |||
Db     221 AACAGGAGAGGGAGGATAAAAATTGGCCTATACTGCCTCCTCCAGTTGCAGAAACATCTG 280

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           | ||  ||||||| ||| ||| |||||||||||||| | |||||||||   ||  |||||
Db     281 TGCCGCCTCCTTCGGTAGCAGGAATAGAGACCCCAATACAAAGAATTTTACGCTCTGCTG 340

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTC 929
           ||||||||||||||||| ||||| |||  ||||  |||||||
Db     341 CCATAGCTGGAGAGCCCTCAGGACCTTGTGCTTTTCCTATTTC 383
```

RESULT 11
AAK20973
ID AAK20973 standard; DNA; 401 BP.
XX
AC AAK20973;
XX
DT 05-NOV-2001 (first entry)
XX
DE Human brain expressed single exon probe SEQ ID NO: 20964.
XX
KW Human; brain expressed exon; gene expression analysis; probe;
KW microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
KW epilepsy; cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200157275-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00667.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-483446/52.
XX
PT Single exon nucleic acid probes for analyzing gene expression in human
PT brains -
XX
PS Example 4; SEQ ID NO: 20964; 650pp + Sequence Listing; English.
XX
CC The present invention provides a number of single exon nucleic acid
CC probes which are derived from genomic sequences expressed in the human
CC brain. They can be used to measure gene expression in brain cell samples,
CC which may enable the diagnosis and improved treatment of nervous system
CC diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC epilepsy and cancers. The present sequence is one of the probes of the
CC invention.
XX
SQ Sequence 401 BP; 115 A; 92 C; 87 G; 107 T; 0 other;

Query Match 12.8%; Score 159; DB 22; Length 401;
Best Local Similarity 82.1%; Pred. No. 1.7e-34;
Matches 183; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

```
Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
           |||| ||| ||| | |||||||||||| ||||||||||||||| |  | |  |||||||| |
Db     161 CTGAGTCTAAAAATCTGAAAGAATCTGTTGTCCCACCCACAGCTTCAATTGAAAATAAAA 220

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           |||||||||||||||| ||||||||| | |||  || |||||||| ||||||||| |||
Db     221 AACAGGAGAGGGAGGATAAAAATTGGCCTATACTGCCTCCTCCAGTTGCAGAAACATCTG 280

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           | ||  ||||||| ||| ||| |||||||||||||| | |||||||||   ||  |||||
Db     281 TGCCGCCTCCTTCGGTAGCAGGAATAGAGACCCCAATACAAAGAATTTTACGCTCTGCTG 340

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTC 929
           ||||||||||||||||| ||||| |||  ||||  |||||||
Db     341 CCATAGCTGGAGAGCCCTCAGGACCTTGTGCTTTTCCTATTTC 383
```

RESULT 12
AAK47126
ID AAK47126 standard; DNA; 401 BP.
XX
AC AAK47126;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human bone marrow expressed single exon probe SEQ ID NO: 21683.
XX
KW Human; bone marrow expressed exon; gene expression analysis; probe;
KW microarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
OS Homo sapiens.
XX
PN WO200157276-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00668.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.

```
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488900/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human bone marrow -
XX
PS   Example 4; SEQ ID NO: 21683; 658pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   bone marrow. They can be used to measure gene expression in bone marrow
CC   samples, which may enable the improved diagnosis and treatment of cancers
CC   such as lymphoma, leukaemia and myeloma. The present sequence is one of
CC   the probes of the invention.
XX
SQ   Sequence 401 BP; 115 A; 92 C; 87 G; 107 T; 0 other;

  Query Match             12.8%;  Score 159;  DB 22;  Length 401;
  Best Local Similarity   82.1%;  Pred. No. 1.7e-34;
  Matches  183;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
           |||| ||| ||| | |||||||||||| |||||||||||||| |  | |  |||||||| |
Db     161 CTGAGTCTAAAAATCTGAAAGAATCTGTTGTCCCACCCACAGCTTCAATTGAAAATAAAA 220

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           |||||||||||||||| ||||||||| | |||  || ||||||||| |||||||||  ||| 
Db     221 AACAGGAGAGGGAGGATAAAAATTGGCCTATACTGCCTCCTCCAGTTGCAGAAACATCTG 280

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           | ||  ||||||| ||| ||| |||||||||||||| | |||||||||   ||  |||||
Db     281 TGCCGCCTCCTTCGGTAGCAGGAATAGAGACCCCAATACAAAGAATTTTACGCTCTGCTG 340

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTC 929
           |||||||||||||||||| ||||| |||  ||||  |||||||
Db     341 CCATAGCTGGAGAGCCCTCAGGACCTTGTGCTTTTCCTATTTC 383


RESULT 13
AAI52962
ID   AAI52962 standard; DNA; 401 BP.
XX
AC   AAI52962;
XX
DT   17-OCT-2001  (first entry)
XX
DE   Probe #21648 used to measure gene expression in human placenta sample.
XX
KW   Probe; microarray; human; placenta; antenatal diagnosis;
KW   genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157272-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00663.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488897/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human placenta -
XX
PS   Claim 25; SEQ ID No 21648; 654pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes (SENP).
CC   The present sequence is one such probe. The probes are useful for
CC   producing a microarray for predicting, measuring and displaying gene
CC   expression in samples derived from human placenta. The probes are useful
CC   for antenatal diagnosis of human genetic disorders.
XX
SQ   Sequence 401 BP; 115 A; 92 C; 87 G; 107 T; 0 other;

  Query Match             12.8%;  Score 159;  DB 22;  Length 401;
  Best Local Similarity   82.1%;  Pred. No. 1.7e-34;
  Matches  183;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
           |||| ||| ||| | |||||||||||| |||||||||||||| |  | |  |||||||| |
Db     161 CTGAGTCTAAAAATCTGAAAGAATCTGTTGTCCCACCCACAGCTTCAATTGAAAATAAAA 220

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           |||||||||||||||| ||||||||| | |||  || ||||||||| |||||||||  ||| 
Db     221 AACAGGAGAGGGAGGATAAAAATTGGCCTATACTGCCTCCTCCAGTTGCAGAAACATCTG 280

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           | ||  ||||||| ||| ||| |||||||||||||| | |||||||||   ||  |||||
Db     281 TGCCGCCTCCTTCGGTAGCAGGAATAGAGACCCCAATACAAAGAATTTTACGCTCTGCTG 340

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTC 929
           |||||||||||||||||| ||||| |||  ||||  |||||||
Db     341 CCATAGCTGGAGAGCCCTCAGGACCTTGTGCTTTTCCTATTTC 383


RESULT 14
ABS21353
ID   ABS21353 standard; DNA; 401 BP.
XX
AC   ABS21353;
XX
DT   19-AUG-2002  (first entry)
XX
DE   Human genome-derived single exon probe ORF from lung SEQ ID No 21344.
XX
KW   Human; ds; single exon probe; asthma; lung cancer; COPD; ILD;
KW   chronic obstructive pulmonary disease; interstitial lung disease;
KW   familial idiopathic pulmonary fibrosis; neurofibromatosis;
KW   tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
KW   Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis;
KW   pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome;
KW   pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
KW   primary ciliary dyskinesis; pulmonary hypertension;
KW   hyaline membrane disease; open reading frame; ORF.
XX
OS   Homo sapiens.
XX
PN   WO200186003-A2.
XX
PD   15-NOV-2001.
XX
PF   30-JAN-2001; 2001WO-US00665.
XX
PR   04-FEB-2000; 2000US-180312P.
PR   26-MAY-2000; 2000US-207456P.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
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XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2002-114183/15.
XX
PT   Spatially-addressable set of single exon nucleic acid probes, used to
PT   measure gene expression in human lung samples -
XX
PS   Claim 4; SEQ ID No 21344; 634pp; English.
XX
CC   The invention relates to a spatially-addressable set of single exon
CC   nucleic acid probes for measuring gene expression in a sample derived
CC   from human lung comprising single exon nucleic acid probes having one of
CC   12614 nucleic acid sequences mentioned in the specification, or their
CC   complements or the 12387 open reading frames derived from the 12614
CC   probes. Also included are a microarray comprising the novel set of
CC   probes; the novel set of probes which hybridise at high stringency to a
CC   nucleic acid expressed in the human lung; measuring gene expression in a
CC   sample derived from human lung, comprising (a) contacting the array with
CC   a collection of detectably labeled nucleic acids derived from human lung
CC   mRNA, and (b) measuring the label detectably bound to each probe of
CC   the array; identifying exons in a eukaryotic genome, comprising
CC   (a) algorithmically predicting at least one exon from genomic sequences
CC   of the eukaryote; and (b) detecting specific hybridisation of detectably
CC   labeled nucleic acids from eukaryote lung mRNA, to a single exon probe,
CC   having a fragment identical to the predicted exon, the probe is included
CC   in the above mentioned microarray; assigning exons to a single gene,
CC   comprising (a) identifying exons from genomic sequence by the method
CC   above and (b) measuring the expression of each of the exons in several
CC   tissues and/or cell types using hybridisation to a single exon
CC   microarrays having a probe with the exon, where a common pattern of
CC   expression of the exons in the tissues and/or cell types indicates that
CC   the exons should be assigned to a single gene; a peptide comprising one
CC   of 12011 sequences, mentioned in the specification, or encoded by the
CC   probes/open reading frames (ORF). The probes are used for gene
CC   expression analysis, and for identifying exons in a gene, particularly
CC   using human lung derived mRNA and for the study of lung diseases
CC   such as asthma, lung cancer, chronic obstructive pulmonary disease
CC   (COPD), interstitial lung disease (ILD), familial idiopathic pulmonary
CC   fibrosis, neurofibromatosis, tuberous sclerosis, Gaucher's disease,
CC   Niemann-Pick disease, Hermansky-Pudlak syndrome, sarcoidosis, pulmonary
CC   haemosiderosis, pulmonary histiocytosis, lymphangioleiomyomtosis,
CC   pulmonary alveolar proteinosis, Karagener syndrome, fibrocystic
CC   pulmonary dysplasia, primary ciliary dyskinesis, pulmonary hypertension
CC   and hyaline membrane disease. The present sequence is a single exon
CC   probe open reading frame of the invention.
CC   Note: The sequence data for this patent did not form part
CC   of the printed specification, but was obtained in electronic
CC   format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 401 BP; 115 A; 92 C; 87 G; 107 T; 0 other;

  Query Match             12.8%;  Score 159;  DB 24;  Length 401;
  Best Local Similarity   82.1%;  Pred. No. 1.7e-34;
  Matches  183;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
           |||| ||| ||| | |||||||||| |||||||||||||| |  | |  |||||||| |
Db     161 CTGAGTCTAAAAATCTGAAAGAATCTGTTGTCCCACCCACAGCTTCAATTGAAAATAAAA 220

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           ||||||||||||||| ||||||||| | |||  || ||||||||| ||||||||| |||
Db     221 AACAGGAGAGGGAGGATAAAAATTGGCCTATACTGCCTCCTCCAGTTGCAGAAACATCTG 280

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           | ||  ||||||| ||| ||| |||||||||||||| | |||||||||   ||  |||||
Db     281 TGCCGCCTCCTTCGGTAGCAGGAATAGAGACCCCAATACAAAGAATTTTACGCTCTGCTG 340

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTC 929
           ||||||||||||||||| ||||| |||  ||||  |||||||
Db     341 CCATAGCTGGAGAGCCCTCAGGACCTTGTGCTTTTCCTATTTC 383


RESULT 15
ABA60008
ID   ABA60008 standard; DNA; 552 BP.
XX
AC   ABA60008;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Human foetal liver single exon nucleic acid probe #8313.
XX
KW   Human; foetal liver; gene expression; single exon nucleic acid probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157277-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00669.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483447/52.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human fetal liver -
XX
PS   Claim 1; SEQ ID NO 8313; 639pp + sequence listing; English.
XX
CC   The invention relates to a single exon nucleic acid probe for
CC   measuring human gene expression in a sample derived from human foetal
CC   liver. The single exon nucleic acid probes may be used for predicting,
CC   measuring and displaying gene expression in samples derived from human
CC   fetal liver. The present sequence is a single exon nucleic acid
CC   probe of the invention.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 552 BP; 164 A; 126 C; 114 G; 148 T; 0 other;

  Query Match             12.8%;  Score 159;  DB 22;  Length 552;
  Best Local Similarity   82.1%;  Pred. No. 2e-34;
  Matches  183;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy     707 CTGAATCTCAAATTTTGAAAGAATCTTTTGTCCCACCCACAACACCCAAAGAAAATAATA 766
           |||| ||| ||| | |||||||||| |||||||||||||| |  | |  |||||||| |
Db     186 CTGAGTCTAAAAATCTGAAAGAATCTGTTGTCCCACCCACAGCTTCAATTGAAAATAAAA 245

Qy     767 AACAGGAGAGGGAGGATGAAAATTGGCGTCTACCACCCCCTCCAGTAGCAGAAACACCTG 826
           ||||||||||||||||| ||||||||| | |||  || ||||||||| ||||||||| |||
Db     246 AACAGGAGAGGGAGGATAAAAATTGGCCTATACTGCCTCCTCCAGTTGCAGAAACATCTG 305

Qy     827 TACCATCTCCTTCAGTAACAGAAATAGAGACCCCACTGCAAAGAATTCCGCGGACTGCTA 886
           | ||  ||||||| ||| ||| |||||||||||||| | |||||||||   ||  |||||
Db     306 TGCCGCCTCCTTCGGTAGCAGGAATAGAGACCCCAATACAAAGAATTTTACGCTCTGCTG 365

Qy     887 CCATAGCTGGAGAGCCCTTAGGACATTGCACTTTCACTATTTC 929
           ||||||||||||||||| ||||| |||  ||||  |||||||
Db     366 CCATAGCTGGAGAGCCCTCAGGACCTTGTGCTTTTCCTATTTC 408
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GenCore version 5.1.3

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Total number of hits satisfying chosen parameters: 4370478

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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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c 3		36.8	3.7	613	23	AAS86992	DNA encoding novel
4		36.2	3.6	411	24	ABN17146	Human ORFX polynuc
c 5		35.2	3.5	3681	24	ABL90758	Human polynucleoti
6		34	3.4	100848	22	AAF28552	Genomic fragment #
7		33.8	3.4	744	20	AAX98839	Human validated ca
c 8		33.8	3.4	1597	21	AAA95810	Tobacco cDNA clone
c 9		33.8	3.4	2168	21	AAA95801	Tobacco NtMFP1-1 c
c 10		33.6	3.4	6761	21	AAA57362	DNA encoding a hum
c 11		33.4	3.3	637	24	ABN76551	Human ORF1498 cDNA
c 12		33.2	3.3	2543	18	AAT74204	Mouse LYST2 cDNA.
13		33.2	3.3	169998	24	AAD36511	Human Her-1 gene.
14		33.2	3.3	197496	24	ABN85584	Human EGFR SEQ ID
c 15		33	3.3	2027	19	AAV25979	Human CD33-like pr
16		32.6	3.3	1814	22	AAK83065	Human immune/haema
c 17		32.6	3.3	4047	21	AAZ38853	Human Jurkat cell
18		32.6	3.3	4047	21	AAZ38863	Human Jurkat cell
c 19		32.6	3.3	13646	24	AAS20126	Human gene for ret
c 20		32.6	3.3	13646	24	AAS20128	Human gene for ret
21		32.4	3.2	289	24	ABK73960	Bacillus lichenifo
c 22		32.4	3.2	4273	23	ABL26800	Drosophila melanog
c 23		32.4	3.2	14849	24	ABK12951	DNA encoding mouse
c 24		32.4	3.2	14849	24	ABK24094	Mouse alpha2 macro
25		32.4	3.2	29598	19	AAV49654	Human SC2 DNA. Ho
c 26		32.2	3.2	300	23	AAS69087	DNA encoding novel
c 27		32.2	3.2	367	22	AAS26498	Human cDNA encodin
28		32.2	3.2	1107	22	AAD04007	Human full length
29		32.2	3.2	1832	22	AAK51903	Human polynucleoti
30		32.2	3.2	2408	22	AAF27634	DNA encoding human
31		32.2	3.2	2544	24	ABQ91988	Human NF-kB activa
32		32.2	3.2	3476	18	AAT95698	Novel human gene,
33		32.2	3.2	4590	22	AAH24065	Yeast AOD9604-asso
34		32	3.2	46366	22	AAK82098	Human immune/haema
35		31.8	3.2	818	22	AAI95312	Human neuroblastom
36		31.8	3.2	838	22	AAS59879	Human novel cytoki
c 37		31.8	3.2	2028	23	ABV22788	Human prostate exp
c 38		31.8	3.2	2028	23	ABV28615	Human prostate exp
c 39		31.8	3.2	6001	24	ABK31214	Signal transductio
40		31.8	3.2	15425	22	AAS36154	Human cardiovascul
41		31.8	3.2	25950	22	AAS31518	Human DNA for a no
42		31.8	3.2	25950	24	ABQ66842	Human polynucleoti
43		31.6	3.2	380	24	ABN26293	Human ORFX polynuc
c 44		31.6	3.2	392	22	AAI85371	Human polynucleoti
c 45		31.6	3.2	700	22	AAD02740	Human headpin (for

ALIGNMENTS

RESULT 1
AAS65122
ID AAS65122 standard; cDNA; 1620 BP.
XX
AC AAS65122;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #926.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG00935.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in

PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 926; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 1620 BP; 408 A; 428 C; 452 G; 332 T; 0 other;

Query Match 13.0%; Score 130; DB 23; Length 1620;
Best Local Similarity 75.7%; Pred. No. 1.6e-29;
Matches 174; Conservative 0; Mismatches 55; Indels 1; Gaps 1;

```
Qy       1 AGCCAGACTAGGAGTGAGCCAGAAGAGGGGAAGGATGGTGGAGGCACAGGCTGCACTCT- 59
Db    1177 AGCCACGGGAGGAGTGAGCCAGAAGAGAACCAGGGCAGTGGAGGTGCGGGCTGCGCTCTC 1236

Qy      60 ACTGGTGCCCCAGACCCAGACTGCATGCCCAGGCTGCAGTCCAAAGGATACTCGGTGCGG 119
Db    1237 ACTGGTGCCACAGACCTAGGCTGTGTTCCCAGGCTGCCGTACAAGGGGTACTCGGTGTGG 1296

Qy     120 GTCCCTGTCCCCCATAGCATCTTAGATCAGCTGCTGAGGCTGGAGCTTCTTCCATTCCTT 179
Db    1297 GTCCCAGCGCCCCTCAGTGGCCTGAGTGATTGGCTGCAGCTGCAGCTTCTTCCAGTTACT 1356

Qy     180 GAGCATCAGGGGTGTGTATCATTTCCAAGGGTTTTCAGACAATCCCTGGT 229
Db    1357 GAGCAACAGGGGCCTGTATCATTTCCAAAGGATTTCAGACAATCCCCGGT 1406
```

RESULT 2
AAA10594/c
ID AAA10594 standard; DNA; 10732 BP.
XX
AC AAA10594;
XX
DT 29-JUN-2000 (first entry)
XX
DE Gene encoding a subunit of cellulose synthase.
XX
KW Cellulose synthase; cellulose production; increase yield; ds.
XX
OS Vigna angularis.
XX
PN JP2000060568-A.
XX
PD 29-FEB-2000.
XX
PF 26-AUG-1998; 98JP-0239998.
XX
PR 26-AUG-1998; 98JP-0239998.
XX
PA (MIZU/) MIZUNO K.
PA (OJIP) OJI PAPER CO.
XX
DR WPI; 2000-342371/30.
DR P-PSDB; AAY85179.
XX
PT A gene encoding a cellulose synthetic equipment - for the improvement
PT in the amount of cellulose synthesised in a plant body
XX
PS Claim 2; Page 14-21; 32pp; Japanese.
XX
CC This sequence represents a gene encoding a subunit of the cellulose
CC synthase complex of Vigna angularis. The invention relates to subunits of
CC cellulose synthetic equipment, that can be used to increase the amount of
CC cellulose synthesised by a plant. The proteins and genes encoding them
CC can also be used to improve the properties of the cellulose being
CC produced by a plant.
XX
SQ Sequence 10732 BP; 3149 A; 1212 C; 2074 G; 2046 T; 2251 other;

Query Match 4.2%; Score 42; DB 21; Length 10732;
Best Local Similarity 14.5%; Pred. No. 0.091;
Matches 82; Conservative 229; Mismatches 247; Indels 8; Gaps 1;

```
Qy     111 TCGGTGCGGGTCCCTGTCCCCCATAGCATCTTAGATCAGCTGCTGAGGCTGGAGCTTCTT 170
Db    9897 YSSRGSDSRGNCYYNSTNCYDASTSDTBYSRCCYTYSYSSTDSTDSTDSTNSTTBSDCYT 9838

Qy     171 CCATTCCTTGAGCATCAGGGGTGTGTATCATTTCCAAGGGTTTTCAGACAATCCCTGGTG 230
Db    9837 TTTBSRSTSDSTSTYRCSRSDYDATBSDNSTNCCYDASRTBTBSTNCYARCYTBYDARCS 9778

Qy     231 ACCCCTGGCAGGGGGCGGTTATCATGGCGATCGGTCCATGGCCTTGCCTCCAAGCAGCAC 290
Db    9777 RDSTYSSRGYDANSTSRYSSRYSSTYSSDSTYSAKYCAKSTTBTBCYYDAYDACYDAYDA 9718

Qy     291 CCAGCAATCCCCATGCCCACCAATGCACTAAATGTTTGTGGTGGGCCTCTTTCTGGAAGC 350
Db    9717 NCYSSDSTYTBYCSRRCCCYYDAYSCSRYDA--------RCYDACYSYSNSTCYDATBTT 9666

Qy     351 TCACCTTCTCCTCCTGTTTGCCCTCCATCTTCCCCAAACCAGTACTTCTGGCCATCCTCC 410
Db    9665 SRYSTTYSYYSNCYDATTSRCTBYSTBTBTTSRCAKCTBDSTSTAKNSTSTYSTTRCTBY 9606

Qy     411 TTGTCACCACAATGGGAAAACTGGGTCCTGGAGACTCAGAAACCACTGTGCAGGCCTCGA 470
Db    9605 SSRSRGYSYCSRSRSRCYSCYTDSDSTCYSTTYSTTYAYSCTTSRGYSYDASRSTSTYSR 9546

Qy     471 GTCTTCCCCTGTCCTGGCTAACAGGGCATGGAATCAGAGAGAAAAGTCATCTTCCACCTC 530
Db    9545 CTTSTYSYSTTDYSDCSDYSTTTBNSTYSSDSDCTBYSSDRCSRSDSTCNCYSCSDSRYS 9486

Qy     531 CTGAAGGCTGCCAGCGTCAGGGCTTGGCACACTGAGGCTGACAGGGGCCTTCTGAAGGCC 590
Db    9485 TTYDACYTYDAAKTBCYTYSDNCCNSTSRCYTNSTYSCSRTBSRNSTCCCTBTTSRGNCC 9426

Qy     591 AGAGGAGATGGCCCGGGACATAAGGCTGAAGCAACCTGTCTGAGCCAAAGATCTGTTTGT 650
Db    9425 YDAYDANSTSRYDAYYDACYYSYDASTTBYSYSCTBYSNSTYDAYSSRYSCYTCYTCDYS 9366

Qy     651 GTCCTCCTGAATCTTAGTGGCCTTCT 676
Db    9365 STCYTRCAKCTBCNSTSRAKSRTTTT 9340
```

RESULT 3
AAS86992/c
ID AAS86992 standard; cDNA; 613 BP.
XX
AC AAS86992;
XX
DT 13-FEB-2002 (first entry)
XX

```
DE   DNA encoding novel human diagnostic protein #22796.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG22805.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity  -
XX
PS   Claim 1; SEQ ID No 22796; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 613 BP; 151 A; 141 C; 163 G; 137 T; 21 other;

  Query Match             3.7%;  Score 36.8;  DB 23;  Length 613;
  Best Local Similarity   51.9%;  Pred. No. 0.81;
  Matches   83;  Conservative    0;  Mismatches   77;  Indels    0;  Gaps    0;

Qy     836 GTCTTTGTCATAGCCTCATATCCAGCTTGTGTGATACCAATTCCAGTGAAGCTGGAACAA 895
           | | | ||| |   ||  ||  || ||||      |||| ||  |  |  | |    |
Db     476 GCCATAGTCCTTAACTACTACACAACTTGCAACCAACCACTTTTACGGGGGTTTCCCCTC 417
               |
Qy     896 GCTGGCACTGCTCAAACAGGCCTACCAAGACATCATGTTTTTTTTTTTTTTTTCCACCAA 955
            ||| || |    | | ||||||| | |    || |  |||  || || |  || |||
Db     416 TCTGTCAATATAAACAAAGGCCTAACCATTACTCCTAGTTTCCTTGTTGTCATCAACCTT 357

Qy     956 ACCTGGACCTGAATGGGGATGTGGACACACATAGAGTCCA 995
           |  | |  |||| | |||   |   |||| |  |  ||||
Db     356 AATTAGGTCTGATTTGGGTGTTCAGCACAAAGGGCCTCCA 317


RESULT 4
ABN17146
ID   ABN17146 standard; cDNA; 411 BP.
XX
AC   ABN17146;
XX
DT   24-JUN-2002  (first entry)
XX
DE   Human ORFX polynucleotide sequence SEQ ID NO:2769.
XX
KW   Human; open reading frame; ORFX; gene therapy; cancer; cirrhosis;
KW   hyperproliferative disorder; psoriasis; benign tumour; haemorrhage;
KW   degenerative disorder; osteoarthritis; neurodegenerative disorder;
KW   cardiovascular disease; diabetes mellitus; systemic lupus erythematosus;
KW   hypertension; hypothyroidism; cholesterol ester storage disease;
KW   immune deficiency; immune disorder; infectious disease;
KW   autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis;
KW   myasthenia gravis; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192523-A2.
XX
PD   06-DEC-2001.
XX
PF   29-MAY-2001; 2001WO-US10836.
XX
PR   30-MAY-2000; 2000US-206132P.
PR   29-AUG-2000; 2000US-228716P.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Leach MD;
XX
DR   WPI; 2002-106308/14.
DR   P-PSDB; ABP01394.
XX
PT   Novel human polypeptides and polynucleotides useful for diagnosing,
PT   preventing and treating cardiovascular disease, neurodegenerative,
PT   hyperproliferative disorders and autoimmune disorders  -
XX
PS   Disclosure; SEQ ID 2769; 1037pp; English.
XX
CC   The present invention describes substantially purified human proteins
CC   (referred to as open reading frame, ORFX, where X is 1-11491 (see Table 1
CC   in the specification). ABN15762 to ABN27252 encode the human ORFX
CC   proteins given in ABP00010 to ABP11500. ORFX proteins are useful for
CC   treating or preventing a pathology associated with an ORFX-associated
CC   disorder in humans, and in the manufacture of a medicament for treating a
CC   syndrome associated with ORFX-associated disorder. ORFX polynucleotide
CC   sequences can be used in gene therapy. ORFX sequences can be used in the
CC   treatment of cancer, hyperproliferative disorders, cirrhosis of liver,
CC   psoriasis, benign tumours, keloid, degenerative disorders, haemorrhage,
CC   osteoarthritis, neurodegenerative disorders, disorders related to organ
CC   transplantation, cardiovascular diseases, diabetes mellitus, systemic
CC   lupus erythematosus, hypertension, hypothyroidism, cholesterol ester
CC   storage disease, various immune deficiencies and disorders, infectious
CC   diseases, autoimmune disorders such as multiple sclerosis, rheumatoid
CC   arthritis, autoimmune thyroiditis, myasthenia gravis, graft-versus-host
CC   disease and autoimmune inflammatory eye disease. ORFX proteins are also
CC   useful for treating burns, incisions, ulcers, for treating osteoporosis,
CC   bone degenerative disorders, or periodontal disease, and for gut
CC   protection or regeneration and treatment of lung or liver fibrosis,
CC   reperfusion injury in various tissues and conditions resulting from
CC   systemic cytokine damage.
CC   N.B.  The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 411 BP; 79 A; 129 C; 130 G; 73 T; 0 other;

  Query Match             3.6%;  Score 36.2;  DB 24;  Length 411;
  Best Local Similarity   54.0%;  Pred. No. 1;
  Matches   74;  Conservative    0;  Mismatches   63;  Indels    0;  Gaps    0;
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```
Qy     480 TGTCCTGGCTAACAGGGCATGGAATCAGAGAGAAAAGTCATCTTCCACCTCCTGAAGGCT 539
           ||||  | ||  || || | |||  ||||  |    |  | ||  |    || |  | ||
Db      22 TGTCGAGACTCTCATGGGAAGGACACAGATGGCGTCGAGAACTGTCGGAGCCAGCGGCCT 81

Qy     540 GCCAGCGTCAGGGCTTGGCACACTGAGGCTGACAGGGGCCTTCTGAAGGCCAGAGGAGAT 599
           ||  | |||| |||| ||      || | ||||  ||||   |   |  ||    | |
Db      82 GCAGGTGTCACGGCTGGGTTTGGGGACGTTGACGTGGGCAAGCACCACCCCGACCGCGCA 141

Qy     600 GGCCCGGGACATAAGGC 616
           |||||||| |||   ||
Db     142 GGCCCGGGCCATGGTGC 158


RESULT 5
ABL90758/c
ID   ABL90758 standard; cDNA; 3681 BP.
XX
AC   ABL90758;
XX
DT   24-MAY-2002  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 1320.
XX
KW   Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW   antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW   vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW   cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; human; secreted protein; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200190304-A2.
XX
PD   29-NOV-2001.
XX
PF   18-MAY-2001; 2001WO-US16450.
XX
PR   19-MAY-2000; 2000US-205515P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Birse CE,  Rosen CA;
XX
DR   WPI; 2002-122018/16.
DR   P-PSDB; ABB90349.
XX
PT   Novel 1405 isolated polypeptides, useful for diagnosis, treatment and
PT   prevention of neural, immune system, muscular, reproductive,
PT   gastrointestinal, pulmonary, cardiovascular, renal and proliferative
PT   disorders -
XX
PS   Claim 4; SEQ ID NO 1320; 2081pp + Sequence Listing; English.
XX
CC   The invention relates to novel genes (ABL89449-ABL90853) and proteins
CC   (ABB89040-ABB90444) useful for preventing, treating or ameliorating
CC   medical conditions e.g. by protein or gene therapy. The genes are
CC   isolated from a range of human tissues disclosed in the specification.
CC   The nucleic acids, proteins, antibodies and (ant)agonists are useful
CC   in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC   and ovarian cancer and other cancers of the adrenal gland, bone, bone
CC   marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC   (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC   haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC   disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC   colitis; (c) cardiovascular disorders such as myocardial ischaemias;
CC   (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC   epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC   and parasitic infections.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 3681 BP; 648 A; 1172 C; 1123 G; 731 T; 7 other;

  Query Match             3.5%;  Score 35.2;  DB 24;  Length 3681;
  Best Local Similarity   55.8%;  Pred. No. 6.6;
  Matches   67;  Conservative    0;  Mismatches   53;  Indels    0;  Gaps    0;

Qy     536 GGCTGCCAGCGTCAGGGCTTGGCACACTGAGGCTGACAGGGGCCTTCTGAAGGCCAGAGG 595
           || ||||| |  |   |     | ||| |  ||||   | | ||| |||  |||||| ||
Db     384 GGATGCCATCCCCGCTGTAACCCTCACGGCAGCTGCAGGAGACCTGCTGGGGGCCAGTGG 325

Qy     596 AGATGGCCCGGGACATAAGGCTGAAGCAACCTGTCTGAGCCAAAGATCTGTTTGTGTCCT 655
           |||||  |  ||    || |  | |||  ||    ||    | | | |||||  | ||||
Db     324 AGATGCACTCGGCGTGAATGTGGCAGCCCCCGTGGTGGATGAGACAGCTGTTAATTTCCT 265


RESULT 6
AAF28552
ID   AAF28552 standard; DNA; 100848 BP.
XX
AC   AAF28552;
XX
DT   04-APR-2001  (first entry)
XX
DE   Genomic fragment #39.
XX
KW   Genomic library; bacteria; human upper airway; otitis media; sinusitis;
KW   bronchopulmonary; endocarditis; meningitis; ss.
XX
OS   Moraxella catarrhalis.
XX
PN   WO200078968-A2.
XX
PD   28-DEC-2000.
XX
PF   16-JUN-2000; 2000WO-US16649.
XX
PR   18-JUN-1999;   99US-0140121.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Lagace RE,  Patterson C,  Berg KL;
XX
DR   WPI; 2001-041427/05.
XX
PT   Genomic library for identifying diagnostic and therapeutic
PT   compositions, and for identifying virulence factors, regulatory
PT   elements and drug targets, comprises Moraxella catarrhalis nucleic
PT   acids -
XX
PS   Claim 1; Page 436-459; 545pp; English.
XX
CC   The present invention relates to a Moraxella catarrhalis genomic library
CC   comprising of a combination of 41 nucleic acid molecules (see
CC   AAF28514-AAF28554). The library has a number of uses described in the
CC   specification e.g. is useful for aidentifying diagnostic and therapeutic
CC   compositions. M. catarrhalis (Branhamella catarrhalis) is a large
CC   aerobic, gram-negative diplococcus, normally found among the bacterial
CC   flora of human upper airways. M. catarrhalis is known to cause acute,
CC   localised infections such as otitis media, sinusitis and bronchopulmonary
CC   infection and life-threatening, systemic diseases including endocarditis
CC   and meningitis.
XX
SQ   Sequence 100848 BP; 28518 A; 19877 C; 22976 G; 29477 T; 0 other;

  Query Match             3.4%;  Score 34;  DB 22;  Length 100848;
  Best Local Similarity   45.0%;  Pred. No. 92;
  Matches  127;  Conservative    0;  Mismatches  155;  Indels    0;  Gaps    0;

Qy     498 ATGGAATCAGAGAGAAAAGTCATCTTCCACCTCCTGAAGGCTGCCAGCGTCAGGGCTTGG 557
           |||   |  || |  |||| ||||||   | |||  |||    |  ||       ||  |
Db   64178 ATGCGTTATGAAAATAAAGCCATCTTAATCGTCCCAAAGTTATCAGGCAGTCATCCTGTG 64237

Qy     558 CACACTGAGGCTGACAGGGGCCTTCTGAAGGCCAGAGGAGATGGCCCGGGACATAAGGCT 617
           |  || || | || || | ||| |   | ||  | ||     |   |    ||| | |||
```

```
Db  64238 CTGACAGATGTTGCCATGTGCCATGAAATGGGTAAAGCTTTGGCGACTTTGCATGACGCT 64297

Qy    618 GAAGCAACCTGTCTGAGCCAAAGATCTGTTTGTGTCCTCCTGAATCTTAGTGGCCTTCTA 677
          | |||||| | |         |  |  | | || |  ||| ||    |       |
Db  64298 TTAACAACCTTGCAGCCAAGTGAAGATTATGGCGTACCACTGTATGACTGGACAAGGGTC 64357

Qy    678 AAGGCGGGTGTGATCAGCCATGGGTATCAGAGACACTGGAGTCCAGTAGCTGCTAGGTGG 737
          || | | |||  | |  | ||  |  |       |     |||   |    | ||  |||
Db  64358 AAAGAGCGTGAAACCGCCTATATGCCTACCGATGAGGCTCGTCTCATGAACGATATCTGG 64417

Qy    738 GACACGGGCACAATTTCACTTGCAGACCAGCTGCACGGAGTG 779
            |     | | || || ||  |||  ||   | ||  ||
Db  64418 ACAGCCTATGCCAATTTACCTGATGACTTGCCCAAAGGCTTG 64459


RESULT 7
AAX98839
ID   AAX98839 standard; cDNA; 744 BP.
XX
AC   AAX98839;
XX
DT   24-SEP-1999  (first entry)
XX
DE   Human validated cancer cell derived cDNA #161.
XX
KW   Cancer; human; colon; breast; lung; transmembrane receptor; ATPase;
KW   integral membrane protein; aspartyl protease; GATA family; wnt family;
KW   transcription factor; G-protein alpha subunit; protein phosphatase;
KW   phorbolester binding protein; diacylglycerol binding protein; trypsin;
KW   protein kinase; tyrosine phosphatase; developmental signalling protein;
KW   WW/rsp5/WWP domain; therapy; forensic; genetic mapping; diagnostic;
KW   detection; treatment; cervical; melanoma; colorectal adenocarcinoma;
KW   Wilm's tumour; retinoblastoma; sarcoma; myosarcoma; lung carcinoma;
KW   leukemia; lymphoma; dysplasia; hyperplasia; endometrium; adrenal;
KW   prostate; ss.
XX
OS   Homo sapiens.
XX
PN   WO9933982-A2.
XX
PD   08-JUL-1999.
XX
PF   22-DEC-1998;   98WO-US27610.
XX
PR   21-DEC-1998;   98US-0217471.
PR   23-DEC-1997;   97US-0068755.
PR   03-APR-1998;   98US-0080664.
PR   21-OCT-1998;   98US-0105234.
PR   27-OCT-1998;   98US-0105877.
XX
PA   (CHIR ) CHIRON CORP.
PA   (HYSE-) HYSEQ INC.
XX
PI   Crkvenjakov R,  Dickson M,  Drmanac R,  Drmanac S;
PI   Escobedo J,  Garcia PD,  Garcia V,  Giese K,  Innis MA;
PI   Jones LW,  Kassam A,  Kennedy GC,  Kita D,  Labat I;
PI   Lamson G,  Leshkowitz D,  Pot D,  Randazzo F,  Reinhard C;
PI   Stache-Crain B,  Sudduth-Klinger J,  Williams LT;
XX
DR   WPI; 1999-430243/36.
XX
PT   New isolated human polynucleotides
XX
PS   Claim 1; Page 478; 591pp; English.
XX
CC   This invention describes novel isolated human polynucleotides obtained
CC   by screening for differential expression in colon cancer, breast cancer
CC   and lung cancer cell lines. The polynucleotides of the invention are
CC   represented in AAX98275-X99118 and encode polypeptides of protein
CC   families selected from 4 transmembrane segments integral membrane
CC   proteins, 7 transmembrane receptors, ATPases associated with various
CC   cellular activities (AAA), eukaryotic aspartyl proteases, GATA family of
CC   transcription factors, G-protein alpha subunit, phorbolesters or
CC   diacylglycerol binding proteins, protein kinase, protein phosphatase 2C,
CC   protein tyrosine phosphatase, trypsin, wnt family of developmental
CC   signalling proteins and WW/rsp5/WWP domain containing proteins. The
CC   encoded polypeptides also have a functional domain selected from Ank
CC   repeat, basic region plus leucine zipper transcription factors,
CC   bromodomain, EF-hand, SH3 domain, WD domain/G-beta repeats, zinc finger
CC   (C2H2 type), zinc finger (CCHC class), and zinc-binding metalloprotease
CC   domain. The polynucleotides encode polypeptides with similarity to known
CC   protein families and are predicted to have similar properties. The novel
CC   polynucleotides can be used to develop products for use as therapeutic
CC   agents and in forensics, genetic analysis, mapping and diagnostic
CC   applications. In particular, the product can be used for the detection
CC   and management of cancers. They can be used for treating e.g. cervical
CC   cancers, melanomas, colorectal adenocarcinomas, Wilm's tumour, sarcomas,
CC   retinoblastoma, myosarcomas, lung carcinomas, leukemias, such as chronic
CC   myelogenous leukemia, promyelocytic leukemia, monocytic leukemia, and
CC   myeloid leukemia, and lymphomas such as histiocytic lymphoma, anhydric
CC   hereditary ectodermal dysplasia, congenital alveolar dysplasia,
CC   epithelial dysplasia of the cervix, fibrous dysplasia of bone, and
CC   mammary dysplasia, hyperplasias, e.g. endometrial, adrenal, breast,
CC   prostate or thyroid hyperplasias or pseudoepitheliomatous hyperplasia of
CC   the skin.
XX
SQ   Sequence 744 BP; 189 A; 169 C; 188 G; 173 T; 25 other;

  Query Match             3.4%;  Score 33.8;  DB 20;  Length 744;
  Best Local Similarity   50.0%;  Pred. No. 7.7;
  Matches  110;  Conservative    0;  Mismatches  108;  Indels    2;  Gaps    1;

Qy    736 GGGACACGGGCACAATTTCACTTGCAGACCAGCTGCACGGAGTGGATAAAGAGAGAGTTC 795
          ||| ||| ||  || || ||| |  | | |||||||     |   |  ||| ||     |
Db    202 GGGCCACTGGGGCATTTNCACGTTAACAGCAGCTGCCACTGGCAAAAGAAGTGACTCGCC 261

Qy    796 TGTGTGGGAATCTCCTTTGGTGGATCATCAGGGAGGTGAAGTCTTTGTCATAGCCTCATA 855
            ||  || |||||   ||  ||  ||  ||   || ||  |  ||   | ||     ||
Db    262 AATGGTGGCATCTCAGATGTGGGCCCAGGAGTCTGGGGAGCTACTTTGAACAG--GGCTA 319

Qy    856 TCCAGCTTGTGTGATACCAATTCCAGTGAAGCTGGAACAAGCTGGCACTGCTCAAACAGG 915
          ||||     |||   |||||   |  || |||     ||   ||     |   |  || |
Db    320 TCCATTCATTGTCCCACCAAAGGCTATGGAGCCCACCCACCATGTGCTGGAGTAGTCAAG 379

Qy    916 CCTACCAAGACATCATGTTTTTTTTTTTTTTTTCCACCAA 955
            |  ||||||   |  || |  || ||   || | |||
Db    380 GGAAATAAGACACTCTCCTTGTCCTTGTTAACTCAATCAA 419


RESULT 8
AAA95810/c
ID   AAA95810 standard; cDNA; 1597 BP.
XX
AC   AAA95810;
XX
DT   09-MAR-2001  (first entry)
XX
DE   Tobacco cDNA clone T3.
XX
KW   Tobacco; T3; MAR binding filament-like protein 1; MFP1;
KW   matrix attachment region; MAR; NtMFP1-2; anchor protein; ss.
XX
OS   Nicotiana tabacum.
XX
PN   WO200061615-A2.
XX
PD   19-OCT-2000.
XX
PF   12-APR-2000; 2000WO-US09723.
XX
PR   12-APR-1999;   99US-0128900.
XX
PA   (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
PI   Harder PA,  Meier I;
XX
```

```
DR   WPI; 2000-679464/66.
XX
PT   Nucleic acid fragments from tobacco, corn, soybean and rice, encoding
PT   proteins that are homologs to the MAR binding filament-like protein 1
PT   (MFP1), useful for development of novel phenotypes -
XX
PS   Claim 1; Page 53; 62pp; English.
XX
CC   The present sequence is tobacco cDNA clone T3, which represents a portion
CC   of a gene encoding matrix attachment region (MAR) binding filament-like
CC   protein 1 (MFP1). It was isolated by screening an oligo-dT-primed
CC   lambda-ZAP cDNA library made from Nicotiana tabacum with cDNA
CC   clones representing tomato MPF1 (LeMPF1) and a tomato homologue of
CC   MFP1. MFP1 has features of a novel anchor protein that most
CC   likely connects chromatin via MAR DNA with the nuclear envelope and
CC   nuclear filament proteins. MFP1 nucleic acids and proteins may be used to
CC   better understand the mechanisms underlying this process so that the
CC   attachment of transgenes to the nuclear matrix may be used routinely to
CC   improve gene expression. They may be used to study MFP1 expression,
CC   leading to the creation of novel developmental phenotypes that may be
CC   beneficial for crop growth and development. In addition, if the reduction
CC   in expression of one of the genes leads to a growth or developmental
CC   defect in the plant, this gene can be used as a novel herbicide target.
XX
SQ   Sequence 1597 BP; 554 A; 298 C; 357 G; 388 T; 0 other;

  Query Match             3.4%;  Score 33.8;  DB 21;  Length 1597;
  Best Local Similarity   48.7%;  Pred. No. 12;
  Matches   92;  Conservative    0;  Mismatches   97;  Indels    0;  Gaps    0;

Qy      55 ACTCTACTGGTGCCCCAGACCCAGACTGCATGCCCAGGCTGCAGTCCAAAGGATACTCGG 114
           ||| ||||  |  |  |   | |      |  |  ||  ||| || |   |  | | |
Db     674 ACTGTACTCTTTGCTGAATTCAATTGGTTAACCAGAGCTTGCCGTTCTTCGCCTGCCCTC 615

Qy     115 TGCGGGTCCCTGTCCCCCATAGCATCTTAGATCAGCTGCTGAGGCTGGAGCTTCTTCCAT 174
           |   | |   | |  |  ||| |   || | ||||| ||| || |||||  ||||||
Db     614 TTAAGTTGATTATTTCGTATATCCCTTTCGTTCAGCAGCTCAGACTGGAATTTCTTCTCC 555

Qy     175 TCCTTGAGCATCAGGGGTGTGTATCATTTCCAAGGGTTTTCAGACAATCCCTGGTGACCC 234
               | ||  ||  | | | || ||        ||||| | | ||  |||  |
Db     554 ATGAAACGAATGTGGCTTCTTTCTCCTTCAGCTTATTTTTCATAGATTCAATGGTTGCAT 495

Qy     235 CTGGCAGGG 243
           | |  | ||
Db     494 CAGAAACGG 486


RESULT 9
AAA95801/c
ID   AAA95801 standard; cDNA; 2168 BP.
XX
AC   AAA95801;
XX
DT   09-MAR-2001  (first entry)
XX
DE   Tobacco NtMFP1-1 cDNA.
XX
KW   Tobacco; MAR binding filament-like protein 1; MFP1;
KW   matrix attachment region; MAR; NtMFP1-1; anchor protein; ss.
XX
OS   Nicotiana tabacum.
XX
FH   Key             Location/Qualifiers
FT   CDS             1..2168
FT                   /*tag=  a
FT                   /transl_except= (pos:484..485,aa:Ser)
FT                   /transl_except= (pos:2013..2018,aa:Glu)
XX
PN   WO200061615-A2.
XX
PD   19-OCT-2000.
XX
PF   12-APR-2000; 2000WO-US09723.
XX
PR   12-APR-1999;   99US-0128900.
XX
PA   (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
PI   Harder PA,  Meier I;
XX
DR   WPI; 2000-679464/66.
DR   P-PSDB; AAB21227.
XX
PT   Nucleic acid fragments from tobacco, corn, soybean and rice, encoding
PT   proteins that are homologs to the MAR binding filament-like protein 1
PT   (MFP1), useful for development of novel phenotypes -
XX
PS   Claim 1; Page 44; 62pp; English.
XX
CC   The present sequence is NtMFP1-1, one of two distinct cDNAs from tobacco
CC   that encode homologues of the matrix attachment region (MAR) binding
CC   filament-like protein 1 (MFP1) from tomato. MFP1 has features of a
CC   novel anchor protein that most likely connects chromatin via MAR DNA with
CC   the nuclear envelope and nuclear filament proteins. MFP1 nucleic acids
CC   and proteins may be used to better understand the mechanisms underlying
CC   this process so that the attachment of transgenes to the nuclear matrix
CC   may be used routinely to improve gene expression. They may be used to
CC   study MFP1 expression, leading to the creation of novel developmental
CC   phenotypes that may be beneficial for crop growth and development. In
CC   addition, if the reduction in expression of one of the genes leads to a
CC   growth or developmental defect in the plant, this gene can be used as a
CC   novel herbicide target.
XX
SQ   Sequence 2168 BP; 762 A; 392 C; 513 G; 501 T; 0 other;

  Query Match             3.4%;  Score 33.8;  DB 21;  Length 2168;
  Best Local Similarity   48.7%;  Pred. No. 14;
  Matches   92;  Conservative    0;  Mismatches   97;  Indels    0;  Gaps    0;

Qy      55 ACTCTACTGGTGCCCCAGACCCAGACTGCATGCCCAGGCTGCAGTCCAAAGGATACTCGG 114
           ||| ||||  |  |  |   | |      |  |  ||  ||| || |   |  | | |
Db     607 ACTGTACTCTTTGCTGAATTCAATTGGTTAACCAGAGCTTGCCGTTCTTCGCCTGCCCTC 548

Qy     115 TGCGGGTCCCTGTCCCCCATAGCATCTTAGATCAGCTGCTGAGGCTGGAGCTTCTTCCAT 174
           |   | |   | |  |  ||| |   || | ||||| ||| || |||||  ||||||
Db     547 TTAAGTTGATTATTTCGTATATCCCTTTCGTTCAGCAGCTCAGACTGGAATTTCTTCTCC 488

Qy     175 TCCTTGAGCATCAGGGGTGTGTATCATTTCCAAGGGTTTTCAGACAATCCCTGGTGACCC 234
               | ||  ||  | | | || ||        ||||| | | ||  |||  |
Db     487 ATGAAACGAATGTGGCTTCTTTCTCCTTCAGCTTATTTTTCATAGATTCAATGGTTGCAT 428

Qy     235 CTGGCAGGG 243
           | |  | ||
Db     427 CAGAAACGG 419


RESULT 10
AAA57362/c
ID   AAA57362 standard; DNA; 6761 BP.
XX
AC   AAA57362;
XX
DT   03-OCT-2000  (first entry)
XX
DE   DNA encoding a human hyaluronan-binding protein, designated WF-HABP.
XX
KW   Hyaluronan-binding protein WF-HABP; OE-HABP; BM-HABP;
KW   proliferative condition; metastasis; inflammation; ischemia;
KW   host defence dysfunction; immune surveillance dysfunction; arthritis;
KW   multiple sclerosis; autoimmunity; immune dysfunction; allergy; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             170..6643
FT                   /*tag=  a
```

```
FT                   /product= "hyaluronan-binding protein"
FT                   /transl_except= (pos: 6341..6343, aa: Xaa)
FT                   /transl_except= (pos: 6494..6496, aa: Xaa)
FT                   /transl_except= (pos: 6536..6538, aa: Xaa)
FT                   /note= "Xaa is an unspecified amino acid"
XX
PN   WO200039166-A1.
XX
PD   06-JUL-2000.
XX
PF   20-DEC-1999;   99WO-US30462.
XX
PR   23-DEC-1998;   98US-0113871.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
PA   (AMNA-) AMERICAN NAT RED CROSS.
XX
PI   Hastings GA,  Liau G,  Tsifrina E;
XX
DR   WPI; 2000-452376/39.
DR   P-PSDB; AAY93910.
XX
PT   New hyaluronan-binding proteins, known as full-length WF-HABP, WF-HABP,
PT   OE-HABP and BM-HABP, useful for treating proliferative conditions,
PT   metastasis, inflammation, ischemia, arthritis and multiple sclerosis -
XX
PS   Claim 2; Fig 1A-H; 457pp; English.
XX
CC   The present sequence encodes a hyaluronan-binding protein. The
CC   specification describes four hyaluronan-binding protein, known as
CC   WF-HABP, WF-HABP, OE-HABP, and BM-HABP. The polypeptides are useful
CC   for treating diseases such as proliferative conditions, metastasis,
CC   inflammation, ischemia, host defence dysfunction, immune surveillance
CC   dysfunction, arthritis, multiple sclerosis, autoimmunity, immune
CC   dysfunction and allergy.
XX
SQ   Sequence 6761 BP; 1231 A; 2118 C; 2090 G; 1311 T; 11 other;

  Query Match             3.4%;  Score 33.6;  DB 21;  Length 6761;
  Best Local Similarity   55.0%;  Pred. No. 29;
  Matches   66;  Conservative    0;  Mismatches   54;  Indels    0;  Gaps    0;

Qy     536 GGCTGCCAGCGTCAGGGCTTGGCACACTGAGGCTGACAGGGGCCTTCTGAAGGCCAGAGG 595
           || ||||| |  |   |     | ||| |  ||||   | | ||| |||  |||||| ||
Db    3536 GGATGCCATCCCCGCTGTAACCCTCACGGCAGCTGCAGGAGACCTGCTGGGGGCCAGTGG 3477

Qy     596 AGATGGCCCGGGACATAAGGCTGAAGCAACCTGTCTGAGCCAAAGATCTGTTTGTGTCCT 655
            ||||  |  ||    || |  | |||  ||    ||    | | | |||||  | ||||
Db    3476 GGATGCACTCGGCGTGAATGTGGCAGCCCCCGTGGTGGATGAGACAGCTGTTAATTTCCT 3417


RESULT 11
ABN76551/c
ID   ABN76551 standard; cDNA; 637 BP.
XX
AC   ABN76551;
XX
DT   08-JUL-2002  (first entry)
XX
DE   Human ORF1498 cDNA, SEQ ID NO:2995.
XX
KW   Human; ORF; open reading frame; ORFX; drug screening; diagnosis;
KW   disease monitoring; cytokine; cell proliferation; cell differentiation;
KW   immune modulation; haematopoiesis regulation; tissue growth;
KW   angiogenesis; activin; inhibin; chemotactic; chemokinetic; haemostatic;
KW   thrombolytic; tumour inhibition; bodily characteristic; fertility;
KW   behaviour; cancer; proliferative disorder; neurological disorder;
KW   cardiovascular disease; immune system disorder; organ transplantation;
KW   tissue growth disorder; tissue regeneration disorder; diabetes mellitus;
KW   hypothyroidism; cholesterol ester storage disease; infection; vulnerary;
KW   vasotropic; antipsoriatic; antidiabetic; cytostatic; nootropic;
KW   neuroprotective; antiatherosclerotic; anticoagulant; thrombolytic;
KW   cardiant; hypotensive; antithyroid; antiinflammatory; immunomodulator;
KW   dermatological; analgesic; virucide; antibacterial; fungicide; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200190366-A2.
XX
PD   29-NOV-2001.
XX
PF   24-MAY-2001; 2001WO-US17076.
XX
PR   24-MAY-2000; 2000US-206690P.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Leach MD,  Shimkets RA;
XX
DR   WPI; 2002-106200/14.
DR   P-PSDB; ABP32525.
XX
PT   Novel human polypeptides and polynucleotides useful for diagnosing,
PT   preventing and treating cardiovascular disease, neurodegenerative,
PT   hyperproliferative disorders and disorders related to organ
PT   transplantation  -
XX
PS   Claim 1; Page 1007; 2508pp; English.
XX
CC   Sequences ABP31028-ABP35561 represent 4534 novel human proteins
CC   designated ORF (open reading frame) 1-4534, and sequences ABN75054-
CC   ABN79587 represent cDNAs encoding them. The invention also encompasses
CC   polypeptides at least 80% identical to the ORF1-ORF4534 (collectively
CC   referred to as ORFX) proteins, polynucleotides at least 85% identical to
CC   the ORFX nucleic acid sequences, vectors and host cells comprising ORFX
CC   polynucleotides, the recombinant production of ORFX proteins, antibodies
CC   specific for ORFX proteins, methods of detecting ORFX polynucleotides and
CC   polypeptides, methods of screening for modulators of ORFX expression or
CC   activity, and methods of screening individuals for a predisposition to an
CC   ORFX-associated disorder. The ORFX proteins of the invention have a wide
CC   range of biological activities, such as cytokine, cell proliferation,
CC   cell differentiation, immune modulation, haematopoiesis regulation,
CC   tissue growth, angiogenesis, activin or inhibin activity, chemotactic/
CC   chemokinetic activity, haemostatic activity, thrombolytic activity,
CC   receptor/ligand, antiinflammatory activity, tumour inhibition activity,
CC   and antiinfective activity, and may also be involved in the determination
CC   of bodily characteristics, fertility and behaviour. ORFX proteins,
CC   nucleic acids and antibodies may be used in the treatment of cancers,
CC   other proliferative disorders such as psoriasis and benign tumours,
CC   neurological disorders such as epilepsy and Alzheimer's disease,
CC   cardiovascular diseases, immune system disorders, disorders related to
CC   organ transplantation, disorders of tissue growth and regeneration,
CC   diseases such as diabetes mellitus, hypothyroidism, and cholesterol ester
CC   storage disease, and infectious diseases caused by viral, bacterial,
CC   fungal and other pathogens. ORFX nucleic acids may also be used as a
CC   source of primers and probes, in the detection of ORFX genomic sequences
CC   or transcripts, in the identification and cloning of homologous
CC   sequences, in genetic diagnosis, and in forensic biology. The ORFX
CC   nucleic acids may additionally be used to produce transgenic animals
CC   which may be useful for studying the function and/or activity of ORFX
CC   protein, and in drug screening. The ORFX proteins may also be used as
CC   immunogens to generate specific antibodies, which are useful in the
CC   diagnosis, treatment and monitoring of ORFX-associated diseases.
XX
SQ   Sequence 637 BP; 80 A; 234 C; 190 G; 133 T; 0 other;

  Query Match             3.3%;  Score 33.4;  DB 24;  Length 637;
  Best Local Similarity   58.6%;  Pred. No. 9.4;
  Matches   58;  Conservative    0;  Mismatches   41;  Indels    0;  Gaps    0;

Qy       1 AGCCAGACTAGGAGTGAGCCAGAAGAGGGGAAGGATGGTGGAGGCACAGGCTGCACTCTA 60
             || | |    || |    ||||  | || ||| ||    | ||| ||||||  | | ||
Db     124 AGGCTGGAAGGGGGGTCTCCAGGTGGGGAGAAAGAACAGGAAGGAACAGGCCCCTCCCTC 65

Qy      61 CTGGTGCCCCAGACCCAGACTGCATGCCCAGGCTGCAGT 99
           |||  ||||  |||||| |||| | |  ||  ||  ||
```

```
Db     64 GTGGGACCCCGCACCCAGGCTGCTTCCTGAGCGTGGGGT 26


RESULT 12
AAT74204/c
ID   AAT74204 standard; cDNA; 2543 BP.
XX
AC   AAT74204;
XX
DT   10-FEB-1998  (first entry)
XX
DE   Mouse LYST2 cDNA.
XX
KW   LYST2; mouse; lysosomal trafficking regulator;
KW   Chediak-Higashi syndrome; CH syndrome; autoimmune disease; tumour;
KW   Alzheimer's disease; motor neuron disease; Parkinson's disease;
KW   acute tubular necrosis; glomerulonephritis; glomerulosclerosis;
KW   vaccine; therapy; diagnosis; ss.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   CDS             3..2114
FT                   /*tag=  a
XX
PN   WO9728262-A1.
XX
PD   07-AUG-1997.
XX
PF   31-JAN-1997;   97WO-US01748.
XX
PR   23-DEC-1996;   96US-0034346.
PR   01-FEB-1996;   96US-0011146.
PR   20-DEC-1996;   96US-0033599.
XX
PA   (UYFL ) UNIV FLORIDA.
XX
PI   Barbosa-Alleyne MDFS,  Kingsmore SF;
XX
DR   WPI; 1997-402616/37.
DR   P-PSDB; AAW23599.
XX
PT   Mammalian lysosomal trafficking regulators LYST1, Lyst1, LYST2 and
PT   Lyst2 - useful to diagnose Chediak-Higashi syndrome
XX
PS   Claim 7; Page 113-114; 237pp; English.
XX
CC   This mouse Lyst2 (lysosomal trafficking regulator) cDNA sequence
CC   was isolated from a mouse embryo cDNA library using a probe
CC   corresponding to human LYST2 (see AAT74203).  Murine Lyst2 nucleic acids
CC   can be used in methods for the recombinant expression of Lyst2
CC   polypeptides (see AAW23599) useful in various pharmacological and
CC   immunological applications, as well as in methods for detecting
CC   LYST2 genes and gene mutations.
XX
SQ   Sequence 2543 BP; 658 A; 637 C; 615 G; 633 T; 0 other;

  Query Match             3.3%;  Score 33.2;  DB 18;  Length 2543;
  Best Local Similarity   50.6%;  Pred. No. 23;
  Matches   80;  Conservative    0;  Mismatches   78;  Indels    0;  Gaps    0;

Qy    331 GTGGGCCTCTTTCTGGAAGCTCACCTTCTCCTCCTGTTTGCCCTCCATCTTCCCCAAACC 390
          |||||| |   ||||||||||   |   |    | | ||  || |  |||   || |||
Db   1358 GTGGGCATTGATCTGGATGCTCTGGTCTACAAGGTCTGTGATCTGCCGCTTGTTCACACC 1299

Qy    391 AGTACTTCTGGCCATCCTCCTTGTCACCACAATGGGAAAACTGGGTCCTGGAGACTCAGA 450
          ||   |  | || ||         || | |||||||| |  | || || ||  |   ||
Db   1298 AGAGTTATTTGCGATTAATGGGTCCATCTCAATGGGAAGATGGTGTGCTTGATCCAAGGA 1239

Qy    451 AACCACTGTGCAGGCCTCGAGTCTTCCCCTGTCCTGGC 488
            | |  |    |   ||| |   |  |||  || |
Db   1238 GTATCCGGGGGCTCCTCTGAGGCCGACTGTGTTGTGCC 1201


RESULT 13
AAD36511
ID   AAD36511 standard; DNA; 169998 BP.
XX
AC   AAD36511;
XX
DT   09-AUG-2002  (first entry)
XX
DE   Human Her-1 gene.
XX
KW   Human; epidermal growth factor receptor; hyperproliferative disease;
KW   Her1; prophylaxis; psoriasis; tumour; cancer; gene; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   exon            1208..1472
FT                   /*tag=  a
FT   intron          1473..124390
FT                   /*tag=  b
FT   exon            124391..124544
FT                   /*tag=  c
FT   intron          124545..125409
FT                   /*tag=  d
FT   exon            125410..125595
FT                   /*tag=  e
FT   intron          125596..128711
FT                   /*tag=  f
FT   exon            128712..128848
FT                   /*tag=  g
FT   intron          128849..133400
FT                   /*tag=  h
FT   exon            133401..133469
FT                   /*tag=  i
FT   intron          133470..134652
FT                   /*tag=  j
FT   exon            134653..134773
FT                   /*tag=  k
FT   intron          134774..136116
FT                   /*tag=  l
FT   exon            136117..136261
FT                   /*tag=  m
FT   intron          136262..137936
FT                   /*tag=  n
FT   exon            137937..138053
FT                   /*tag=  o
FT   intron          138054..138637
FT                   /*tag=  p
FT   exon            138638..138766
FT                   /*tag=  q
FT   intron          138767..138864
FT                   /*tag=  r
FT   exon            138865..138940
FT                   /*tag=  s
FT   intron          138941..139765
FT                   /*tag=  t
FT   exon            139766..139860
FT                   /*tag=  u
FT   intron          139861..142245
FT                   /*tag=  v
FT   exon            142246..142445
FT                   /*tag=  w
FT   intron          142446..143605
FT                   /*tag=  x
FT   exon            143606..143738
FT                   /*tag=  y
FT   intron          143739..145838
FT                   /*tag=  z
FT   exon            145839..145931
FT                   /*tag=  aa
FT   intron          145932..147385
FT                   /*tag=  ab
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FT   exon            147386..147544
FT                   /*tag=  ac
FT   intron          147545..153274
FT                   /*tag=  ad
FT   exon            153275..153321
FT                   /*tag=  ae
FT   intron          153322..155088
FT                   /*tag=  af
FT   exon            155089..155231
FT                   /*tag=  ag
FT   intron          155232..156025
FT                   /*tag=  ah
FT   exon            156026..156151
FT                   /*tag=  ai
FT   intron          156152..156826
FT                   /*tag=  aj
FT   exon            156827..156928
FT                   /*tag=  ak
FT   intron          156929..163399
FT                   /*tag=  al
FT   exon            163400..163586
FT                   /*tag=  am
XX
PN   WO200226758-A1.
XX
PD   04-APR-2002.
XX
PF   28-SEP-2001; 2001WO-US30551.
XX
PR   29-SEP-2000; 2000US-0676610.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR, Freier SM;
XX
DR   WPI; 2002-394234/42.
XX
PT   Novel antisense oligonucleotide that specifically hybridizes with and
PT   inhibits nucleic acid encoding epidermal growth factor receptor, useful
PT   for treating hyperproliferative disease such as cancer or psoriasis -
XX
PS   Example 19; Page 67-121; 169pp; English.
XX
CC   The invention relates to an antisense oligonucleotide targetted to a
CC   nucleic acid molecule encoding human epidermal growth factor receptor
CC   (Her1) to inhibit its expression. The antisense compounds are useful
CC   for treating diseases or conditions associated with Her-1 such as
CC   hyperproliferative diseases especially cancer (lung, ovarian, colon
CC   or prostrate cancer) and psoriasis. They are also useful as research
CC   reagents, diagnostics, therapeutics, kits and prophylactically e.g.
CC   to prevent or delay tumour formation. The present sequence is
CC   human Her-1 gene.
XX
SQ   Sequence 169998 BP; 46143 A; 38164 C; 37751 G; 47940 T; 0 other;

  Query Match             3.3%;  Score 33.2;  DB 24;  Length 169998;
  Best Local Similarity   59.6%;  Pred. No. 2.1e+02;
  Matches   56;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy     506 AGAGAGAAAAGTCATCTTCCACCTCCTGAAGGCTGCCAGCGTCAGGGCTTGGCACACTGA 565
           || | |   ||  | |    |||  | |  ||| ||||| | ||||||  ||  ||| |
Db   57186 AGGGTGTGTAGGTAGCCCAGACCATCAGTGGGCAGCCAGGGCCAGGGCAGGGGCCACGGT 57245

Qy     566 GGCTGACAGGGGCCTTCTGAAGGCCAGAGGAGAT 599
           || | | |    ||||| |||| ||||| | ||
Db   57246 TGCAGCCTGCATTCTTCTAAAGGGCAGAGCAAAT 57279


RESULT 14
ABN85584
ID   ABN85584 standard; DNA; 197496 BP.
XX
AC   ABN85584;
XX
DT   09-SEP-2002  (first entry)
XX
DE   Human EGFR SEQ ID NO 10.
XX
KW   Human; EGFR; HER2-neu; chemotherapeutic regimen; tumour; cancer;
KW   receptor tyrosine kinase; epidermal growth factor receptor;
KW   gene expression; ds.
XX
OS   Homo sapiens.
XX
PN   WO200244413-A2.
XX
PD   06-JUN-2002.
XX
PF   09-NOV-2001; 2001WO-US43035.
XX
PR   01-DEC-2000; 2000US-250122P.
PR   04-DEC-2000; 2000US-250469P.
PR   11-JUN-2001; 2001US-0877177.
XX
PA   (RESP-) RESPONSE GENETICS INC.
XX
PI   Danenberg KD;
XX
DR   WPI; 2002-537460/57.
XX
PT   Determining chemotherapeutic regimen of receptor tyrosine kinase
PT   targeted agent for treating tumor by examining EGFR and/or HER2-neu
PT   mRNA amount in tumor cells, comparing it to predetermined threshold
PT   expression level -
XX
PS   Disclosure; Page 71-124; 125pp; English.
XX
CC   The invention relates to determining the chemotherapeutic regimen of
CC   receptor tyrosine kinase targeted agent for treating tumour by amplifying
CC   mRNA from tumour and non-malignant tissues using a primer pair that
CC   hybridises to epidermal growth factor receptor (EGFR) and/or HER2-neu
CC   gene (I), quantitating and obtaining differential expression levels of
CC   amplified mRNA and comparing the differential expression levels and
CC   threshold levels for expression of (I). The method is useful for
CC   assessment of clinical treatment of a patient and as a diagnostic or
CC   prognostic tool for a range of cancers including breast, head and neck,
CC   lung, oesophageal and colorectal cancer. The present sequence is that of
CC   the human EGFR DNA sequence used in methods of the invention.
XX
SQ   Sequence 197496 BP; 53640 A; 44528 C; 43228 G; 56100 T; 0 other;

  Query Match             3.3%;  Score 33.2;  DB 24;  Length 197496;
  Best Local Similarity   59.6%;  Pred. No. 2.3e+02;
  Matches   56;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy     506 AGAGAGAAAAGTCATCTTCCACCTCCTGAAGGCTGCCAGCGTCAGGGCTTGGCACACTGA 565
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Db   65186 AGGGTGTGTAGGTAGCCCAGACCATCAGTGGGCAGCCAGGGCCAGGGCAGGGGCCACGGT 65245

Qy     566 GGCTGACAGGGGCCTTCTGAAGGCCAGAGGAGAT 599
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Db   65246 TGCAGCCTGCATTCTTCTAAAGGGCAGAGCAAAT 65279


RESULT 15
AAV25979/c
ID   AAV25979 standard; cDNA; 2027 BP.
XX
AC   AAV25979;
XX
DT   21-JUL-1998  (first entry)
XX
DE   Human CD33-like protein encoding cDNA.
XX
KW   Human; CD33; CD33-like protein; tumour; inflammatory disease;
KW   leukaemia; bone marrow; monocyte; haematopoietic; antibody; ss.
```

```
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             37..1692
FT                   /*tag=  a
FT                   /product= "CD33-like protein"
FT   sig_peptide     37..81
FT                   /*tag=  b
XX
PN   WO9806733-A1.
XX
PD   19-FEB-1998.
XX
PF   09-AUG-1996;   96WO-US13007.
XX
PR   09-AUG-1996;   96WO-US13007.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Gentz RL,  Ni J,  Rosen CA;
XX
DR   WPI; 1998-159451/14.
DR   P-PSDB; AAW55884.
XX
PT   New nucleic acid nearly identical to sequence encoding CD33-like
PT   protein - useful in, e.g. diagnosis of tumour or inflammatory
PT   disease and purging bone marrow monocytic haematopoietic cells from
PT   leukaemia patients
XX
PS   Claim 1; Fig 1; 83pp; English.
XX
CC   The present sequence encodes a CD33-like protein. The present sequence
CC   was obtained by sequencing the HMQCD14 cDNA clone contained in ATCC
CC   Deposit No. 97521. An isolated antibody that binds specifically to the
CC   CD33-like protein may be used for the detection of the CD33-like protein
CC   or its mRNA, and so is useful for, e.g. diagnosing a tumour or
CC   inflammatory disease. The antibody (especially an immunotoxin), can
CC   also be used to remove or deplete haematopoietic cells expressing the
CC   CD33-like protein antigen, which can be used to purge bone marrow
CC   monocytic haematopoietic cells obtained from a leukaemia patient, which
CC   can subsequently be reinfused into a patient previously subjected to
CC   myeloablative chemotherapy. The antibody can also be used as an
CC   antagonist to inhibit the CD33-like protein receptor signalling pathway,
CC   useful for inhibiting the growth or selective killing of tumour cells.
XX
SQ   Sequence 2027 BP; 477 A; 602 C; 547 G; 401 T; 0 other;

  Query Match              3.3%;  Score 33;  DB 19;  Length 2027;
  Best Local Similarity   53.5%;  Pred. No. 23;
  Matches   69;  Conservative    0;  Mismatches   60;  Indels    0;  Gaps    0;

Qy     530 CCTGAAGGCTGCCAGCGTCAGGGCTTGGCACACTGAGGCTGACAGGGGCCTTCTGAAGGC 589
           | || | | || | |  | |  |  ||| | ||||||||  | ||||      ||||
Db    1960 CATGCATGATGTCTGATTTACAGAATGGGAAACTGAGGCACAGAGGGATGCAGTGAATTG 1901

Qy     590 CAGAGGAGATGGCCCGGGACATAAGGCTGAAGCAACCTGTCTGAGCCAAAGATCTGTTTG 649
           |         |  || || | ||    |||  | |||| ||| |  | |  |||||||
Db    1900 CTTGATGACAGTGCCAGGGCCTAGATTTGAGCCCACCTCTCTAATTCCATCATCTGTTTT 1841

Qy     650 TGTCCTCCT 658
             | || ||
Db    1840 CTTTCTGCT 1832


Search completed: December 24, 2002, 16:59:46
Job time : 421.786 secs
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GenCore version 5.1.3

OM nucleic - nucleic search, using sw model

Run on: December 24, 2002, 16:23:56 ; Search time 165.952 Seconds
(without alignments)
13583.723 Million cell updates/sec

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Perfect score:. 1001
Sequence: 1 ggagatggataaaccgtgtg.....ccaattcaggagtctatgtg 1001

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	1001	100.0	2578	21	AAZ93065	HERV-AVL3-B tumour
	2	584.6	58.4	4977	22	AAS26628	Human genomic DNA
	3	455.6	45.5	2202	21	AAC79006	Human secreted pro
	4	454	45.4	2166	22	AAH18610	Human cDNA sequenc
	5	418.6	41.8	808	22	AAH07625	Human cDNA clone (
	6	217.8	21.8	1537	24	ABL49833	Human neurogenesis
	7	192.6	19.2	4823	24	ABN87696	Human prostate spe
	8	180.4	18.0	189	22	AAL08345	Human breast cance
	9	180.4	18.0	189	22	AAL18160	Human breast cance
	10	178.8	17.9	184	22	AAL19385	Human breast cance
	11	174.4	17.4	176	22	AAL26090	Human breast cance
	12	171.8	17.2	200	22	AAL08998	Human breast cance
	13	164.8	16.5	273	24	ABL80406	Human ovarian canc
	14	152.8	15.3	660	23	AAS92505	DNA encoding novel
	15	152.6	15.2	2652	22	AAH15033	Human cDNA sequenc
	16	151.8	15.2	522	22	AAI43362	Probe #12048 used
	17	151.8	15.2	1384	24	AAL44826	Human cancer cell
	18	151.8	15.2	1384	24	AAL44827	Human cancer cell
	19	151.4	15.1	609	24	ABQ56844	Human colon cancer
	20	151	15.1	1715	22	AAS41104	cDNA encoding nove
	21	149.4	14.9	1773	23	AAS92506	DNA encoding novel
	22	148	14.8	932	23	AAS69023	DNA encoding novel
	23	131.4	13.1	443	22	AAL19260	Human breast cance
	24	129.4	12.9	131	22	AAL26310	Human breast cance
	25	124.4	12.4	572	22	ABA61773	Human foetal liver
	26	124.4	12.4	572	22	AAK10083	Human brain expres
	27	124.4	12.4	572	22	AAK35978	Human bone marrow
	28	124.4	12.4	572	22	AAI41692	Probe #10378 used
	29	121.4	12.1	625	22	AAL08565	Human breast cance
c	30	103.2	10.3	254	20	AAX27261	Prostate-tumour de
	31	103.2	10.3	465	22	ABA57306	Human foetal liver
	32	103.2	10.3	465	22	ABA26859	Probe #5325 for ge
	33	103.2	10.3	465	22	AAK05341	Human brain expres
	34	103.2	10.3	465	22	AAK30934	Human bone marrow
	35	103.2	10.3	465	22	AAI15470	Probe #5403 for ge
	36	103.2	10.3	465	22	AAI36847	Probe #5533 used t
	37	103.2	10.3	465	24	ABS05682	Human genome-deriv
c	38	103.2	10.3	51402	22	AAK72363	Human immune/haema
	39	100.6	10.0	143068	21	AAF21105	Human low adenosin
	40	100.6	10.0	143068	21	AAF21272	Human low adenosin
	41	100.6	10.0	143068	21	AAA34983	Human adenosine re
	42	100.6	10.0	143068	21	AAA35150	Human adenosine re
	43	100.6	10.0	143068	24	ABL68124	Ovary cancer relat
	44	100.6	10.0	149412	21	AAA35151	Human adenosine re
	45	100.6	10.0	152740	21	AAF21273	Human low adenosin

ALIGNMENTS

RESULT 1
AAZ93065
ID AAZ93065 standard; DNA; 2578 BP.
XX
AC AAZ93065;
XX
DT 19-JUN-2000 (first entry)
XX
DE HERV-AVL3-B tumour associated polypeptide coding sequence.
XX
KW Tumour; tumour associated antigen; retrovirus; antisense;
KW treatment; probe; primer; HLA; cytotoxic T-lymphocyte; cancer;
KW testis; antibody; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
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FT /*tag= a
FT /label= 5' LTR region
FT LTR 2197..2480
FT /*tag= b
FT /label= 3' LTR region
XX
PN WO200006598-A1.
XX
PD 10-FEB-2000.
XX
PF 15-JUL-1999; 99WO-US16236.
XX
PR 29-JUL-1998; 98US-0124398.
XX

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PA   (LUDW-) LUDWIG INST CANCER RES.
XX
PI   Coulie P,  Boon-falleur T;
XX
DR   WPI; 2000-205453/18.
DR   P-PSDB; AAY82952.
XX
PT   Novel nucleic acids encoding melanoma associated gene products and
PT   their fragments and variants, useful for treating endogenous retrovirus
PT   mediated tumors, especially melanomas  -
XX
PS   Claim 1; Figure 3; 77pp; English.
XX
CC   Tumor associated disorders (e.g. endogenous retrovirus mediated
CC   tumors, especially melanomas) can be treated or ameliorated by
CC   administering antisense nucleic acid to reduce the expression of
CC   tumour associated genes such as HERV-AVL3-B. Progression of
CC   a disorder characterized by the expression of the HERV-AVL3-B
CC   endogenous retrovirus tumor rejection antigen (ERTRA) can be
CC   diagnosed or monitored by contacting a non-testis biological
CC   sample with an agent that binds to the complex and determining
CC   the interaction. A disorder can also be treated by administering
CC   an agent that enriches the presence of HLA and HERV-AVL3-B ERTRA
CC   or by administering autologous cytotoxic T-cells sufficient to
CC   ameliorate the disorder. Fragments of the HERV-AVL3-B coding sequence
CC   are useful as probes or amplification primers for determining the
CC   expression of HERV-AVL3-B genes, to express tumor associated
CC   polypeptides in vivo and in vitro and to prepare fragments of such
CC   polypeptides to synthesize antibodies. Antigenic peptides of
CC   HERV-AVL3-B can be useful for generating antibodies either alone or
CC   as fusion proteins, as components of immunoassay and for determining
CC   the binding specificity of HLA molecules and/or cytotoxic T
CC   lymphocyte (CTL) for HERV-AVL3-B proteins.
XX
SQ   Sequence 2578 BP; 785 A; 573 C; 515 G; 705 T; 0 other;

  Query Match             100.0%;  Score 1001;  DB 21;  Length 2578;
  Best Local Similarity   100.0%;  Pred. No. 4.1e-313;
  Matches 1001;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db    259 GGAGATGGATAAACCGTGTGAGTGCCCTCAAGTTGTGTGCGACCATGGAATGGGAGACTG 318

Qy     61 GAGGGATACATGGATCCCAACTACAGGCCCAGCTCCTCCAGTATGAGCCATGAGCCAGTT 120
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Db    319 GAGGGATACATGGATCCCAACTACAGGCCCAGCTCCTCCAGTATGAGCCATGAGCCAGTT 378

Qy    121 GAATCTGAATGTGAAGATGGAATGAAGACCGACGAGAGTCACACTGACGTCAACCCTCAT 180
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Db    379 GAATCTGAATGTGAAGATGGAATGAAGACCGACGAGAGTCACACTGACGTCAACCCTCAT 438

Qy    181 AACATGGGGTCAGATCAAGAAAACCACACCAGAAGCTGAGAAACTGGTGTAGTGCCAGGG 240
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Qy    241 TCAGGCAAAAACCCCTGACTCCATGTTTATGGCCATGCTAGCTGTAATATCCTGTGCAGT 300
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Qy    301 ATGATTTTTCTGTGCAGAAGCAAAAACATATTGGGCATATTTTCCTAACCCACCGGTAGT 360
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Db    559 ATGATTTTTCTGTGCAGAAGCAAAAACATATTGGGCATATTTTCCTAACCCACCGGTAGT 618

Qy    361 GTGATCATACTCTGAAGCAGCACTCCTCCTGAGATATATCATGATCAAGGAGCATCAGTA 420
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Qy    481 TATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAACTGC 540
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          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    919 CCAAATTGTACTGATTATACAGAATGGGCTCCCTTTGATAATTCTCACCCCCCTCCTTGG 978

Qy    721 GCCCACTGTCTTGGCCCCTTAGCTAGACAATAGTCCATGTTAATGGGAGACATTATTGAC 780
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Qy    781 TGGGGTCCCTGTGGTCATTAAGATGGGAGAGATGAGAATCAGACCACATGGCATAAACTT 840
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Db   1039 TGGGGTCCCTGTGGTCATTAAGATGGGAGAGATGAGAATCAGACCACATGGCATAAACTT 1098

Qy    841 CACTGGCACTGGTGGCGAAACTTTAACATCTCTTCACTTCAACACACTGGGATTCAATCC 900
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Qy    901 CAATCTGCCATGCAACTTGCTTGGCATGGAACGGGCTTTAGCCCACCTTTGCCTCAATGG 960
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Qy    961 CATTATCAAGGAAAGAGAGGTCCAATTCAGGAGTCTATGTG 1001
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Db   1219 CATTATCAAGGAAAGAGAGGTCCAATTCAGGAGTCTATGTG 1259


RESULT 2
AAS26628
ID   AAS26628 standard; DNA; 4977 BP.
XX
AC   AAS26628;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human genomic DNA encoding partial novel secreted protein, Seq ID 1602.
XX
KW   Human; immunosuppressive; antiarthritic; ds; antirheumatic;
KW   cytostatic; cardiant; vasotropic; cerebroprotective; nootropic;
KW   neuroprotective; antibacterial; virucide; fungicide; opthalmalogical;
KW   vulnerary; secreted protein; rheumatoid arthritis;
KW   hyperproliferative disorder; cardiovascular disorder; cardiac arrest;
KW   cerebrovascular disorder; cerebral ischaemia; angiogenesis;
KW   nervous system disorder; Alzheimer's disease; infection; ocular disorder;
KW   corneal infection; wound healing; epithelial cell proliferation;
KW   skin ageing; food additive; preservative; antiproliferative.
XX
OS   Homo sapiens.
XX
PN   WO200155322-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01341.
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PR   31-JAN-2000; 2000US-0179065.
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PR   02-MAR-2000; 2000US-0186350.
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PR 17-NOV-2000; 2000US-0249210.
PR 17-NOV-2000; 2000US-0249211.
PR 17-NOV-2000; 2000US-0249212.
PR 17-NOV-2000; 2000US-0249213.
PR 17-NOV-2000; 2000US-0249214.
PR 17-NOV-2000; 2000US-0249215.
PR 17-NOV-2000; 2000US-0249216.
PR 17-NOV-2000; 2000US-0249217.
PR 17-NOV-2000; 2000US-0249218.
PR 17-NOV-2000; 2000US-0249244.
PR 17-NOV-2000; 2000US-0249245.
PR 17-NOV-2000; 2000US-0249264.
PR 17-NOV-2000; 2000US-0249265.
PR 17-NOV-2000; 2000US-0249297.
PR 17-NOV-2000; 2000US-0249299.
PR 17-NOV-2000; 2000US-0249300.
PR 01-DEC-2000; 2000US-0250160.
PR 01-DEC-2000; 2000US-0250391.
PR 05-DEC-2000; 2000US-0251030.
PR 05-DEC-2000; 2000US-0251988.
PR 05-DEC-2000; 2000US-0256719.
PR 06-DEC-2000; 2000US-0251479.
PR 08-DEC-2000; 2000US-0251856.
PR 08-DEC-2000; 2000US-0251868.
PR 08-DEC-2000; 2000US-0251869.
PR 08-DEC-2000; 2000US-0251989.
PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-488783/53.
XX
PT New nucleic acid molecules encoding 461 human secreted proteins for
PT diagnosing, preventing, treating or ameliorating medical conditions and
PT used as food additives or preservatives -
XX
PS Disclosure; SEQ ID No 1602; 980pp; English.
XX
CC The invention relates to isolated nucleic acid molecules and their
CC encoded secreted proteins. The nucleic acids and proteins are used to
CC prevent, treat or ameliorate a medical condition in e.g. humans, mice,
CC rabbits, goats, horses, cats, dogs, chickens or sheep. They
CC are also used in diagnosing a pathological condition or susceptibility
CC to a pathological condition. Antibodies to the proteins can also

CC be used in alleviating symptoms associated with the disorders and in
CC diagnostic immunoassays e.g. radioimmunoassays or enzyme linked
CC immunosorbant assays (ELISA). Disorders which are diagnosed or treated
CC include autoimmune diseases e.g. rheumatoid arthritis,
CC hyperproliferative disorders e.g. neoplasms of the breast or liver,
CC cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders
CC e.g. cerebral ischaemia, angiogenesis, nervous system disorders e.g.
CC Alzheimer's disease, infections caused by bacteria, viruses and fungi
CC and ocular disorders e.g. corneal infection, and many other
CC disorders listed in the specification. The polypeptides can also
CC be used to aid wound healing and epithelial cell proliferation, to
CC prevent skin aging due to sunburn, to maintain organs before
CC transplantation, for supporting cell culture of primary tissues, to
CC regenerate tissues and in chemotaxis. The polypeptides can also be used
CC as a food additive or preservative to increase or decrease storage
CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
CC minerals, cofactors and other nutritional components. The present
CC sequence is a genomic DNA encoding a partial novel secreted protein of
CC the invention.

Query Match 58.4%; Score 584.6; DB 22; Length 4977;
Best Local Similarity 74.9%; Pred. No. 4.3e-178;
Matches 745; Conservative 0; Mismatches 249; Indels 1; Gaps 1;

```
Qy       7 GGATAAACCGTGTGAGTGCCCTCAAGTTGTGTGCGACCATGGAATGGGAGACTGGAGGGA 66
          ||| || || |||| |||||||||||| ||  |||||||||||||||||||||||||||| |
Db    2587 GGACAAGCCATGTGGGTGCCCTCAAGGTGCATGCGACCATGGAATGGGAGACTGGAGGAA 2646

Qy      67 TACATGGATCCCAACTACAGGCCCAGCTCCTCCAGTATGAGCCATGAGCCAGTTGAATCT 126
            || ||   ||||| |  |||||||  ||||| ||| |||| ||||| ||| |||  ||
Db    2647 CCCAGGGTGGCCAACCATGGGCCCAGTCCCTCCTGTACGAGCTATGAGTCAGCTGAGCCT 2706

Qy     127 GAATGTGAAGATGGAATGAAGACCGACGAGAGTCACACTGACGTCAACCCTCATAACATG 186
          || ||  ||||||||  |||| || || |||||||   |||| |||||||  |||||| ||
Db    2707 GAGTGCAAAGATGGAGAGAAGGCCAACCAGAGTCATGATGACATCAACCCCCATAACCTG 2766

Qy     187 GGGTCAGATCAAGAAAACCACACCAGAAGCTGAGAAACTGGTGTAGTGCCAGGGTCAGGC 246
          ||| ||  ||||||||||||||||  ||||||||||||||  || |||| ||||| |||||
Db    2767 GGGACAACTCAAGAAAACCACACAGGAAGCTGAGAAACTACTGGAGTGTCAGGGACAGGC 2826

Qy     247 AAAAACCCCTGACTCCATGTTTATGGCCATGCTAGCTGTAATATCCTGTGCAGTATGATT 306
           |||||||||||| |||||| |  |||||||| |||| |||| ||||||||| || | ||
Db    2827 -AAAACCCCTGATTCCATGCTCTTGGCCATGTTAGCCATAATGTCCTGTGCACTACGTTT 2885

Qy     307 TTTCTGTGCAGAAGCAAAAACATATTGGGCATATTTTCCTAACCCACCGGTAGTGTGATC 366
          |  ||||||| | |||||||||||||||||||||| |||| || || || | ||| ||  |
Db    2886 TCCCTGTGCACAGGCAAAAACATATTGGGCATATGTTCCCAATCCCCCAGCAGTATGGCC 2945

Qy     367 ATACTCTGAAGCAGCACTCCTCCTGAGATATATCATGATCAAGGAGCATCAGTACCAGGA 426
                |       |||||||||||||| ||||| ||||| |||| |  |  ||||||
Db    2946 TATACTTTGGAGCTCACTCCTCCTGAGATTTATCACGATCAGGGAGAGTGGGCTCCAGGA 3005

Qy     427 CCTCTAACTCCCCCTGACACAGAGCAATTAGACTCTCATAACAATGGTATCAATTATACC 486
          || |||||||||| ||||| |||  | |||||||||| |||||||  || |||||||||
Db    3006 CCCCTAACTCCCCGTGACATAGAAAAGTTAGACTCTCAGAACAATGTCATTAATTATACC 3065

Qy     487 ACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAACTGCAGTTGC 546
          |||||| |||| ||||| ||||| | | |||||     | || | |||||  |    || ||
Db    3066 ACTCCACTGGAAGGACTCCCTTTGTTTATCACCACAAAGACGTCGCTCAGCCATAGCTGT 3125

Qy     547 CTTGCAGTTTGATCCCAAGCATGGTTGAGTTACCATAAAAAAATTATGTACCTATTAGAC 606
          |||||| ||  | | ||| |||||||||| || ||  |||||||||||| ||||||
Db    3126 CTTGCAATTCAAGCTCAAACATGGTTGAGTCACTATGGAAAAATTATGTACTTATTAGGT 3185

Qy     607 CTTAGCTTTATTAATATTACTTGTGTAGTTACTAATCACTCCTGGCCCCATCACCCAAAT 666
          ||| | | ||||||| | ||| ||||  | || ||||| |||  | ||  |||||| |||
Db    3186 CTTGGTTCTATTAATGTAACTGGTGTGCTAACCAATCATTCCCAGTCCAGTCACCCTAAT 3245

Qy     667 TGTACTGATTATACAGAATGGGCTCCCTTTGATAATTCTCACCCCCCTCCTTGGGCCCAC 726
          ||| ||||||||||||||||  ||| ||  ||| |||  ||||| |||  ||| ||||
Db    3246 TGTGCTGATTATACAGAATGGATTCCATTCAATAGTTCCTACCCCACTCTGTGGACCCAG 3305

Qy     727 TGTCTTGGCCCCTTAGCTAGACAATAGTCCATGTTAATGGGAGACATTATTGACTGGGGT 786
          ||||||| ||  | ||||| || | |  |||| ||  | ||||| | | || ||||
Db    3306 TGTCTTGATCCACTGGCTAGTAAACAATATATGTCAACTGAAGACACTGTGGATTGGGAA 3365

Qy     787 CCCTGTGGTCATTAAGATGGGAGAGATGAGAATCAGACCACATGGCATAAACTTCACTGG 846
          ||    ||||| | |||||| | || ||| | |||||   ||||||| ||||||||||||
Db    3366 CCTAAAGGTCAATTAGATGGAAAAGGTGAAAGTCAGAAATCATGGCACAAACTTCACTGG 3425

Qy     847 CACTGGTGGCGAAACTTTAACATCTCTTCACTTCAACACACTGGGATTCAATCCCAATCT 906
          || ||| ||| |   |||||    |||||  |  |  |||   | || ||||||||| |||
Db    3426 CATTGGCGGCAAGCTTTTAATGCTTCTTCTTTATACAACAGCAGAATCCAATCCCAGTCT 3485

Qy     907 GCCATGCAACTTGCTTGGCATGGAACGGGCTTTAGCCCACCTTTGCCTCAATGGCATTAT 966
          ||    ||  |||||||||||||| | |||||||||||||| | ||||| | |||||||
Db    3486 GCTGCTCAGATTGCTTGGCATGGAGCAGGCTTTAGCCCACCTCTTCCTCAGTTGCATTAT 3545

Qy     967 CAAGGAAAGAGAGGTCCAATTCAGGAGTCTATGTG 1001
          |  || | || ||| |||||||| ||  |||| ||
Db    3546 CTGGGGAGGAAAGGACCAATTCAAGAAACTATATG 3580
```

RESULT 3
AAC79006
ID AAC79006 standard; DNA; 2202 BP.
XX
AC AAC79006;
XX
DT 14-FEB-2001 (first entry)
XX
DE Human secreted protein gene 10 clone HONAH67.
XX
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW neurological disease; infection; human; secreted protein; ss.
XX
OS Homo sapiens.
XX
PN WO200058358-A1.
XX
PD 05-OCT-2000.
XX
PF 23-MAR-2000; 2000WO-US07725.
XX
PR 26-MAR-1999; 99US-0126602.
PR 14-JAN-2000; 2000US-0176063.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Komatsoulis G;
XX
DR WPI; 2000-594640/56.
DR P-PSDB; AAB44344.
XX
PT Fourty nine nucleic acid molecules encoding human secreted proteins,
PT useful in the prevention, treatment and diagnosis of cancer, immune
PT disorders, cardiovascular disorders and neurological diseases -
XX
PS Claim 1; Page 321; 367pp; English.
XX
CC The invention relates to the isolation of genes AAC78997-C79045 encoding
CC 49 human secreted proteins AAB44335-B44382. The genes can be used to
CC generate fusion proteins by linking to the gene for the human
CC immunoglobulin G Fc portion (AAC78988) for increasing the stability of
CC the fusion protein as compared to the human protein only. The genes and
CC proteins are useful for preventing, ameliorating or treating medical
CC conditions, e.g. by protein or gene therapy. The genes are isolated
CC from a range of human tissues disclosed in the specification. The
CC nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC and ovarian cancer, and other cancers of the adrenal gland, bone, bone
CC marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC (b) immune disorders e.g. Addison's disease, allergies, autoimmune

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CC   haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC   disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC   colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d)
CC   wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC   epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC   and parasitic infections.
XX
SQ   Sequence 2202 BP; 633 A; 491 C; 437 G; 633 T; 8 other;

  Query Match            45.5%;  Score 455.6;  DB 21;  Length 2202;
  Best Local Similarity  76.2%;  Pred. No. 1.7e-136;
  Matches  571;  Conservative    1;  Mismatches  176;  Indels    1;  Gaps    1;

Qy    254 CCTGACTCCATGTTTATGGCCATGCTAGCTGTAATATCCTGTGCAGTATGATTTTTCTGT 313
          ||||| ||||||||  |||||||| ||||  ||||||||||||||||||| |||| ||||
Db      9 CCTGATTCCATGTTCTTGGCCATGTTAGCCATAATATCCTGTGCAGTATGTTTTTCCTGT 68

Qy    314 GCAGAAGCAAAAACATATTGGGCATATTTTCCTAACCCACCGGTAGTGTGA-TCATACTC 372
          ||||| ||||||||||||||||||||| |||| || || || | ||| |||  ||||||
Db     69 GCAGAGGCAAAAACATATTGGGCATATGTTCCCAAGCCCCCAGCAGTATGACCCATACTT 128

Qy    373 TGAAGCAGCACTCCTCCTGAGATATATCATGATCAAGGAGCATCAGTACCAGGACCTCTA 432
          || ||   |||||||||| |||| ||||||||| |||||||||  |  ||||||||  |||
Db    129 TGGAGTGACACTCCTCCTAAGATTTATCATGATTAAGGAGCATGGGCTCCAGGACCCCTA 188

Qy    433 ACTCCCCCTGACACAGAGCAATTAGACTCTCATAACAATGGTATCAATTATACCACTCCA 492
          ||||| ||||||| ||| || |||||||||| || ||||  || |||||||| |||||
Db    189 ACTCCACCTGACATAGAACAGTTAGACTCTCAGAATAATGTCATTAATTATACCGCTCCA 248

Qy    493 TTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAACTGCAGTTGCCTTGCA 552
          |||||  |||||||||| |||||||||    | ||||  |||| |   || || ||| ||
Db    249 TTGGAANGACTTCCTTTGTGTGTCACCACAAAGACATCACTCAGCCATAGCTGTCTTACA 308

Qy    553 GTTTGATCCCAAGCATGGTTGAGTTACCATAAAAAAATTATGTACCTATTAGACCTTAGC 612
          |||  | | ||  |||||||||| || ||   ||||| ||||| |||||   ||| |
Db    309 GTTCAAGCTCACACATGGTTGAGTCACTATGGGAAAATCATGTACTTATTAAGTCTTGGT 368

Qy    613 TTTATTAATATTACTTGTGTAGTTACTAATCACTCCTGGCCCCATCACCCAAATTGTACT 672
          | ||||||| | ||  |||| | || || || ||||||||  || ||   ||||| ||
Db    369 TATATTAATGTAACCGGTGTGCTAACCAACCATTCCTGGCCCAGTCGCCTTCATTGTGCT 428

Qy    673 GATTATACAGAATGGGCTCCCTTTGATAATTCTCACCCCCCTCCTTGGGCCCACTGTCTT 732
          || ||||||||||||  ||||||  ||| |||  |||||||||| | | |||| ||||||
Db    429 GACTATACAGAATGGATTCCCTTCAATAGTTCCTACCCCCCTCCATAGACCCAGTGTCTT 488

Qy    733 GGCCCCTTAGCTAGACAATAGTCCATGTTAATGGGAGACATTATTGACTGGGGTCCCTGT 792
           ||||  | |||||| || | || ||||||||  |||||||||  | || :|||| ||
Db    489 AGCCCACTGGCTAGAAAACAWTCTATGTTAACTGGAGACATTGTGGATKGGGGACCTAAA 548

Qy    793 GGTCATTAAGATGGGAGAGATGAGAATCAGACCACATGGCATAAACTTCACTGGCACTGG 852
          || || | |||||| | ||| || |||||||   ||||||| ||||||  |||||| |||
Db    549 GGCCAATTAGATGGAAAAGAAGAAAATCAGAAATCATGGCACAAACTTTGCTGGCATTGG 608

Qy    853 TGGCGAAACTTTAACATCTCTTCACTTCAACACACTGGGATTCAATCCCAATCTGCCATG 912
          |||| |   |||||    |||||  |  |  |||||||||| |||||||| || |||
Db    609 TGGCAAGCTTTTAATGCTTCTTCTTTATATAACACTGGGATCCAATCCCAGTCGGCCGCC 668

Qy    913 CAACTTGCTTGGCATGGAACGGGCTTTAGCCCACCTTTGCCTCAATGGCATTATCAAGGA 972
          ||  |||||||||||||| | |||||||||| ||| | ||||| |||||||||  |||
Db    669 CAGATTGCTTGGCATGGAGCAGGCTTTAGCCCGCCTCTTCCTCAGTGGCATTATCTAGGG 728

Qy    973 AAGAGAGGTCCAATTCAGGAGTCTATGTG 1001
          | || ||| ||||||||  ||   || ||
Db    729 AGGAAAGGACCAATTCAAAAGATGATATG 757


RESULT 4
AAH18610
ID   AAH18610 standard; cDNA; 2166 BP.
XX
AC   AAH18610;
XX
DT   26-JUN-2001  (first entry)
XX
DE   Human cDNA sequence SEQ ID NO:18816.
XX
KW   Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS   Homo sapiens.
XX
PN   EP1074617-A2.
XX
PD   07-FEB-2001.
XX
PF   28-JUL-2000; 2000EP-0116126.
XX
PR   29-JUL-1999;   99JP-0248036.
PR   27-AUG-1999;   99JP-0300253.
PR   11-JAN-2000; 2000JP-0118776.
PR   02-MAY-2000; 2000JP-0183767.
PR   09-JUN-2000; 2000JP-0241899.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Isogai T,  Nishikawa T,  Hayashi K,  Saito K,  Yamamoto J;
PI   Ishii S,  Sugiyama T,  Wakamatsu A,  Nagai K,  Otsuki T;
XX
DR   WPI; 2001-318749/34.
XX
PT   Primer sets for synthesizing polynucleotides, particularly the 5602
PT   full-length cDNAs defined in the specification, and for the detection
PT   and/or diagnosis of the abnormality of the proteins encoded by the
PT   full-length cDNAs -
XX
PS   Claim 8; SEQ ID 18816; 2537pp + CD ROM; English.
XX
CC   The present invention describes primer sets for synthesising 5602
CC   full-length cDNAs defined in the specification. Where a primer set
CC   comprises: (a) an oligo-dT primer and an oligonucleotide complementary
CC   to the complementary strand of a polynucleotide which comprises one of
CC   the 5602 nucleotide sequences defined in the specification, where the
CC   oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC   of an oligonucleotide comprising a sequence complementary to the
CC   complementary strand of a polynucleotide which comprises a 5'-end
CC   sequence and an oligonucleotide comprising a sequence complementary to a
CC   polynucleotide which comprises a 3'-end sequence, where the
CC   oligonucleotide comprises at least 15 nucleotides and the combination of
CC   the 5'-end sequence/3'-end sequence is selected from those defined in
CC   the specification. The primer sets can be used in antisense therapy and
CC   in gene therapy. The primers are useful for synthesising polynucleotides,
CC   particularly full-length cDNAs. The primers are also useful for the
CC   detection and/or diagnosis of the abnormality of the proteins encoded by
CC   the full-length cDNAs. The primers allow obtaining of the full-length
CC   cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC   AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to
CC   AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632
CC   represent oligonucleotides, all of which are used in the exemplification
CC   of the present invention.
XX
SQ   Sequence 2166 BP; 611 A; 488 C; 434 G; 633 T; 0 other;

  Query Match            45.4%;  Score 454;  DB 22;  Length 2166;
  Best Local Similarity  76.4%;  Pred. No. 5.4e-136;
  Matches  570;  Conservative    0;  Mismatches  175;  Indels    1;  Gaps    1;

Qy    257 GACTCCATGTTTATGGCCATGCTAGCTGTAATATCCTGTGCAGTATGATTTTTCTGTGCA 316
          || ||| ||||  |||||||| ||||  |||||||||||||||||| |||| |||||||
Db      1 GATTCCGTGTTCTTGGCCATGTTAGCCATAATATCCTGTGCAGTATGTTTTTCCTGTGCA 60

Qy    317 GAAGCAAAAACATATTGGGCATATTTTCCTAACCCACCGGTAGTGTGA-TCATACTCTGA 375
          || |||||||||||||||||||| |||| || || || | ||| |||  |||||| ||
Db     61 GAGGCAAAAACATATTGGGCATATGTTCCCAAGCCCCCAGCAGTATGACCCATACTTTGG 120

Qy    376 AGCAGCACTCCTCCTGAGATATATCATGATCAAGGAGCATCAGTACCAGGACCTCTAACT 435
          ||   |||||||||| |||| |||||||| |||||||||  |  |||||||| ||||||
Db    121 AGTGACACTCCTCCTAAGATTTATCATGATTAAGGAGCATGGGCTCCAGGACCCCTAACT 180
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Qy    436 CCCCCTGACACAGAGCAATTAGACTCTCATAACAATGGTATCAATTATACCACTCCATTG 495
          || ||||||| ||| || |||||||||||| || ||||  ||.|||||||| ||||||||
Db    181 CCACCTGACATAGAACAGTTAGACTCTCAGAATAATGTCATTAATTATACCGCTCCATTG 240

Qy    496 GAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAACTGCAGTTGCCTTGCAGTT 555
          || |||||||||| |||||||||    | ||||  |||| |   || || ||| |||||
Db    241 GAAGGACTTCCTTTGTGTGTCACCACAAAGACATCACTCAGCCATAGCTGTCTTACAGTT 300

Qy    556 TGATCCCAAGCATGGTTGAGTTACCATAAAAAAAATTATGTACCTATTAGACCTTAGCTTT 615
            | | ||  |||||||||| || ||   ||||| |||||| |||||   ||| | | |
Db    301 CAAGCTCACACATGGTTGAGTCACTATGGGAAAATCATGTACTTATTAAGTCTTGGTTAT 360

Qy    616 ATTAATATTACTTGTGTAGTTACTAATCACTCCTGGCCCCATCACCCAAATTGTACTGAT 675
          |||||| | ||  ||||  | || || || ||||||||| ||| ||   ||||| ||||
Db    361 ATTAATGTAACCGGTGTGCTAACCAACCATTCCTGGCCCAATCGCCTTCATTGTGCTGAC 420

Qy    676 TATACAGAATGGGCTCCCTTTGATAATTCTCACCCCCCTCCTTGGGCCCACTGTCTTGGC 735
          ||||||||||  |||||  ||| |||  |||||||||| | | |||| |||||||||
Db    421 TATACAGAATGGATTCCCTTCAATAGTTCCTACCCCCCTCCATAGACCCAGTGTCTTGGC 480

Qy    736 CCCTTAGCTAGACAATAGTCCATGTTAATGGGAGACATTATTGACTGGGGTCCCTGTGGT 795
          ||  | |||||| || | || |||||||  |||||||| | || |||||  ||    ||
Db    481 CCACTGGCTAGAAAACAATCTATGTTAACTGGAGACATTGTGGATTGGGGACCTAAAGGC 540

Qy    796 CATTAAGATGGGAGAGATGAGAATCAGACCACATGGCATAAACTTCACTGGCACTGGTGG 855
          || | |||||| | ||| || |||||||   | |||||  ||||||  ||||||  ||||||
Db    541 CAATTAGATGGAAAAGAAGAAAATCAGAAATCGTGGCACAAACTTTGCTGGCATTGGTGG 600

Qy    856 CGAAACTTTAACATCTCTTCACTTCAACACACTGGGATTCAATCCCAATCTGCCATGCAA 915
          | |   |||||    |||||  |  |  |||||||||  |||||||  || |||   ||
Db    601 CAAGCTTTTAATGCTTCTTCTTTATATAACACTGGGATCCAATCCCAGTCGGCCGCCCAG 660

Qy    916 CTTGCTTGGCATGGAACGGGCTTTAGCCCACCTTTGCCTCAATGGCATTATCAAGGAAAG 975
          ||||||||||||| | |||||||||| ||| | ||||| |||||||||| ||| | |
Db    661 ATTGCTTGGCATGGAGCAGGCTTTAGCCCGCCTCTTCCTCAGTGGCATTATCTAGGGAGG 720

Qy    976 AGAGGTCCAATTCAGGAGTCTATGTG 1001
          | ||| ||||||||  ||   || ||
Db    721 AAAGGACCAATTCAAAAGATGATATG 746
```

RESULT 5
AAH07625
ID AAH07625 standard; cDNA; 808 BP.
XX
AC AAH07625;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human cDNA clone (5'-primer) SEQ ID NO:4460.
XX
KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-0116126.
XX
PR 29-JUL-1999; 99JP-0248036.
PR 27-AUG-1999; 99JP-0300253.
PR 11-JAN-2000; 2000JP-0118776.
PR 02-MAY-2000; 2000JP-0183767.
PR 09-JUN-2000; 2000JP-0241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602
PT full-length cDNAs defined in the specification, and for the detection
PT and/or diagnosis of the abnormality of the proteins encoded by the
PT full-length cDNAs -
XX
PS Claim 1; SEQ ID 4460; 2537pp + CD ROM; English.
XX
CC The present invention describes primer sets for synthesising 5602
CC full-length cDNAs defined in the specification. Where a primer set
CC comprises: (a) an oligo-dT primer and an oligonucleotide complementary
CC to the complementary strand of a polynucleotide which comprises one of
CC the 5602 nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in
CC the specification. The primer sets can be used in antisense therapy and
CC in gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to
CC AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632
CC represent oligonucleotides, all of which are used in the exemplification
CC of the present invention.
XX
SQ Sequence 808 BP; 227 A; 186 C; 169 G; 219 T; 7 other;

Query Match 41.8%; Score 418.6; DB 22; Length 808;
Best Local Similarity 76.1%; Pred. No. 9.1e-125;
Matches 553; Conservative 0; Mismatches 171; Indels 3; Gaps 3;

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Qy    257 GACTCCATGTTTATGGCCATGCTAGCTGTAATATCCTGTGCAGTATGATTTTTCTGTGCA 316
          || ||| |||| |||||||| |||| |||||||||||||||||| |||| |||||||
Db      1 GATTCCGTGTTCTTGGCCATGTTAGCCATAATATCCTGTGCAGTATGTTTTTCCTGTGCA 60

Qy    317 GAAGCAAAAACATATTGGGCATATTTTCCTAACCCACCGGTAGTGTGA-TCATACTCTGA 375
          || |||||||||||||||||||| |||| || || || | ||| |||  |||||| ||
Db     61 GAGGCAAAAACATATTGGGCATATGTTCCCAAGCCCCCAGCAGTATGACCCATACTTTGG 120

Qy    376 AGCAGCACTCCTCCTGAGATATATCATGATCAAGGAGCATCAGTACCAGGACCTCTAACT 435
          ||   |||||||||| |||| ||||||||| |||||||||  |  |||||||| ||||||
Db    121 AGTGACACTCCTCCTAAGATTTATCATGATTAAGGAGCATGGGCTCCAGGACCCCTAACT 180

Qy    436 CCCCCTGACACAGAGCAATTAGACTCTCATAACAATGGTATCAATTATACCACTCCATTG 495
          || ||||||| ||| || |||||||||||| || ||||  || ||||||||| ||||||||
Db    181 CCACCTGACATAGAACAGTTAGACTCTCAGAATAATGTCATTAATTATACCGCTCCATTG 240

Qy    496 GAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAACTGCAGTTGCCTTGCAGTT 555
          || |||||||||| |||||||||    | ||||  |||| |   || || ||| |||||
Db    241 GAAGGACTTCCTTTGTGTGTCACCACAAAGACATCACTCAGCCATAGCTGTCTTACAGTT 300

Qy    556 TGATCCCAAGCATGGTTGAGTTACCATAAAAAAAATTATGTACCTATTAGACCTTAGCTTT 615
            | | ||  |||||||||| || ||   ||||| |||||| |||||   ||| | | |
Db    301 CAAGCTCACACATGGTTGAGTCACTATGGGAAAATCATGTACTTATTAAGTCTTGGTTAT 360

Qy    616 ATTAATATTACTTGTGTAGTTACTAATCACTCCTGGCCCCATCACCCAAATTGTACTGAT 675
          |||||| | ||  ||||  | || || || ||||||||| ||| ||   ||||| ||||
Db    361 ATTAATGTAACCGGTGTGCTAACCAACCATTCCTGGCCCAATCGCCTTCATTGTGCTGAC 420

Qy    676 TATACAGAATGGGCTCCCTTTGATAATTCTCACCCCCCTCCTTGGGCCCACTGTCTTGGC 735
          ||||||||||  |||||  ||| |||  |||||||||| | | |||| |||||||||
Db    421 TATACAGAATGGATTCCCTTCAATAGTTCCTACCCCCCTCCATAGACCCAGTGTCTTGGC 480

Qy    736 CCCTTAGCTAGACAATAGTCCATGTTAATGGGAGACATTATTGACTGGGGTCCCTGTGGT 795
          ||  | |||||| || | || |||||||  |||||||| | || |||||  ||    ||
Db    481 CCACTGGCTAGAAAACAATCTATGTTAACTGGAGACATTGTGGATTGGGGACCTAAAGGC 540
```

```
Qy    796 CATTAAGATGGGAGAGATGAGAATCAGACCACATGGCATAAACTTCACTGGCACTGGTGG 855
          || | |||||| | ||| || |||||||   | ||||| ||||||  |||||| ||||||
Db    541 CAATTAGATGGAAAAGAAGAAAATCAGAAATCGTGGCACAAACTTTGCTGGCATTGGTGG 600

Qy    856 CGAAACTTTAACATCTCTTCACTTCAACACACT-GGGATTCAATCCCAATCTGCCATGCA 914
          | |   |||||    |||||  |  |  ||||| |||||||||||||| || | |   ||
Db    601 CAAGCTTTTAATGCTTCTTCTTTATATAACACTGGGGATTCAATCCCAGTCGGNCGCCCA 660

Qy    915 AC-TTGCTTGGCATGGAACGGGCTTTAGCCCACCTTTGCCTCAATGGCATTATCAAGGAA 973
          |  |||||||||||||  |  |||||||||| ||| | ||||| ||||||||| | |
Db    661 ANATTGCTTGGCATGGAGCAAGCTTTAGCCCGCCTCTTCCTCAGTGGCATTATCTAAGGG 720

Qy    974 AGAGAGG 980
          ||  | |
Db    721 AGGAAAG 727
```

RESULT 6
ABL49833
ID ABL49833 standard; cDNA; 1537 BP.
XX
AC ABL49833;
XX
DT 05-JUN-2002 (first entry)
XX
DE Human neurogenesis related protein 12 encoding cDNA SEQ ID NO:1.
XX
KW Human; neurogenesis related protein 12; malignant tumour; haemopathy;
KW HIV infection; immunological disease; inflammation; gene; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 349..678
FT /*tag= a
FT /product= "Human neurogenesis related protein 12"
XX
PN CN1324832-A.
XX
PD 05-DEC-2001.
XX
PF 19-MAY-2000; 2000CN-0115776.
XX
PR 19-MAY-2000; 2000CN-0115776.
XX
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
DR WPI; 2002-217510/28.
DR P-PSDB; ABB06369.
XX
PT New polypeptide human neurogenesis related protein 12 and
PT polynucleotides for encoding same -
XX
PS Claim 6; Page 24-25 (Disclosure); 31pp; Chinese.
XX
CC The present sequence encodes human neurogenesis related protein 12 (I).
CC The present invention also describes a method for producing (I) using
CC DNA recombination techniques. (I) and the polynucleotide encoding it
CC can be used in the treatment of several diseases, such as malignant
CC tumour, haemopathy, HIV infection, immunological disease and various
CC inflammations.
XX
SQ Sequence 1537 BP; 403 A; 384 C; 353 G; 397 T; 0 other;

Query Match 21.8%; Score 217.8; DB 24; Length 1537;
Best Local Similarity 78.4%; Pred. No. 1.4e-59;
Matches 261; Conservative 0; Mismatches 72; Indels 0; Gaps 0;

```
Qy      1 GGAGATGGATAAACCGTGTGAGTGCCCTCAAGTTGTGTGCGACCATGGAATGGGAGACTG 60
          ||||||||| |||||||||| |||||||| || |||||| |||||||||| ||||||| |
Db    345 GGAGATGGACAAACCGTGTGGGTGCCCTCCAGGTGTGTGTGACCATGGAACGGGAGACCG 404

Qy     61 GAGGGATACATGGATCCCAACTACAGGCCCAGCTCCTCCAGTATGAGCCATGAGCCAGTT 120
          ||||||| |||||    ||||    ||||     ||||||||| ||||||||||||||
Db    405 GAGGGATCCATGGTATTCAACCGTGGGCCTGTTACCTCCAGTACGAGCCATGAGCCAGCG 464

Qy    121 GAATCTGAATGTGAAGATGGAATGAAGACCGACGAGAGTCACACTGACGTCAACCCTCAT 180
          ||||||||||  ||||  |||  | | |||||  |||||||| |||| || | || |||
Db    465 GAATCTGAATGCAAAGACAGAACAAGGGCCGACCGGAGTCACAATGACATCCAACCCCAT 524

Qy    181 AACATGGGGTCAGATCAAGAAAACCACACCAGAAGCTGAGAAACTGGTGTAGTGCCAGGG 240
          |||||||| |||||||||||||| |||| ||||||||||||||  || || |||||||
Db    525 AACATGGGGACAGATCAAGAAAACGACACAAGAAGCTGAGAAACTACTGGAGCGCCAGGG 584

Qy    241 TCAGGCAAAAACCCCTGACTCCATGTTTATGGCCATGCTAGCTGTAATATCCTGTGCAGT 300
          |||||||||||||||||||||||||  ||||||||||||||| | ||||||||
Db    585 TCAGGCAAAAACCCCTGACTCCATGTTCTTGGCCATGCTAGCTGTAGTGTCCTGTGCGTC 644

Qy    301 ATGATTTTTCTGTGCAGAAGCAAAAACATATTG 333
             |   |   ||| |  | |||      ||||
Db    645 TATAGGATCGGGTGAACCACCAACCGGCAATTG 677
```

RESULT 7
ABN87696
ID ABN87696 standard; cDNA; 4823 BP.
XX
AC ABN87696;
XX
DT 08-AUG-2002 (first entry)
XX
DE Human prostate specific gene cDNA sequence SEQ ID NO:47.
XX
KW Human; prostate specific gene; prostate specific protein; PSG; PSP;
KW prostate cancer; chromosome 5; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200236808-A2.
XX
PD 10-MAY-2002.
XX
PF 05-NOV-2001; 2001WO-US47283.
XX
PR 03-NOV-2000; 2000US-245740P.
XX
PA (DIAD-) DIADEXUS INC.
XX
PI Sun Y, Recipon H, Chen S, Liu C;
XX
DR WPI; 2002-471506/50.
XX
PT New prostate-specific nucleic acids and polypeptides, useful for
PT identifying, diagnosing, monitoring, staging, imaging, and treating
PT prostate cancer and non-cancerous disease states in prostate tissue -
XX
PS Claim 1; Page 178-180; 254pp; English.
XX
CC ABN87650 to ABN87789 represent human prostate-specific nucleic acids (I),
CC and ABB79192 to ABB79295 represent human prostate-specific proteins (II)
CC from the present invention. (I) and (II) have cytostatic activity. (I)
CC can be used in gene therapy. The prostate-specific nucleic acids,
CC polypeptides and compositions from the present invention can be used for
CC identifying, diagnosing, monitoring, staging, imaging, and treating
CC prostate cancer and non-cancerous disease states in prostate tissue; for
CC identifying prostate tissue; for monitoring, identifying and/or designing
CC agonists and antagonists of the polypeptides; in gene therapy; in
CC producing transgenic animals and cells; for producing engineered prostate
CC tissue for treatment and research; and as elements in an array or
CC computer program for pattern recognition of prostate disorders. The
CC nucleic acids may be used as hybridisation probes to detect, characterise
CC and quantify hybridising nucleic acids in, and isolate hybridising
CC nucleic acids from, both genomic and transcript-derived nucleic acid

```
CC   samples.
XX
SQ   Sequence 4823 BP; 1310 A; 1187 C; 1224 G; 1102 T; 0 other;

  Query Match             19.2%;  Score 192.6;  DB 24;  Length 4823;
  Best Local Similarity   81.9%;  Pred. No. 3.9e-51;
  Matches  222;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy      31 AGTTGTGTGCGACCATGGAATGGGAGACTGGAGGGATACATGGATCCCAACTACAGGCCC 90
           || |||||| |||||||||| ||||||| |||||||| |||||    ||||    ||||
Db    2315 AGGTGTGTGTGACCATGGAACGGGAGACCGGAGGGATCCATGGTATTCAACCGTGGGCCT 2374

Qy      91 AGCTCCTCCAGTATGAGCCATGAGCCAGTTGAATCTGAATGTGAAGATGGAATGAAGACC 150
           |||||||||| |||||||||||||  ||||||||||  ||||  |||  | | ||
Db    2375 GTTACCTCCAGTACGAGCCATGAGCCAGCGGAATCTGAATGCAAAGACAGAACAAGGGCC 2434

Qy     151 GACGAGAGTCACACTGACGTCAACCCTCATAACATGGGGTCAGATCAAGAAAACCACACC 210
           |||  |||||||| |||| || | || |||||||||||| |||||||||||||| ||||
Db    2435 GACCGGAGTCACAATGACATCCAACCCCATAACATGGGGACAGATCAAGAAAACGACACA 2494

Qy     211 AGAAGCTGAGAAACTGGTGTAGTGCCAGGGTCAGGCAAAAACCCCTGACTCCATGTTTAT 270
           ||||||||||||||  || || |||||||||||||||||||||||||||||||||  |
Db    2495 AGAAGCTGAGAAACTACTGGAGCGCCAGGGTCAGGCAAAAACCCCTGACTCCATGTTCTT 2554

Qy     271 GGCCATGCTAGCTGTAATATCCTGTGCAGTA 301
           |||||||||||||||| | |||||||| | |
Db    2555 GGCCATGCTAGCTGTAGTGTCCTGTGCGGAA 2585


RESULT 8
AAL08345
ID   AAL08345 standard; cDNA; 189 BP.
XX
AC   AAL08345;
XX
DT   07-DEC-2001  (first entry)
XX
DE   Human breast cancer expressed polynucleotide 802.
XX
KW   Human; breast cancer; cell marker; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200151628-A2.
XX
PD   19-JUL-2001.
XX
PF   10-JAN-2001; 2001WO-US00798.
XX
PR   14-JAN-2000; 2000US-0176077.
PR   14-MAR-2000; 2000US-0189167.
PR   24-MAR-2000; 2000US-0192099.
PR   29-MAR-2000; 2000US-0193480.
PR   15-MAY-2000; 2000US-0205230.
PR   09-JUN-2000; 2000US-0211315.
PR   25-JUL-2000; 2000US-0220534.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lillie J,  Xu Y,  Wang Y,  Steinmann K;
XX
DR   WPI; 2001-451856/48.
XX
PT   New peptide useful as a marker for the diagnosis of breast cancer  -
XX
PS   Claim 1; Page 214; 3695pp; English.
XX
CC   The invention relates to human breast cancer expressed polynucleotides
CC   (AAL07544-AAL26789) and methods of assessing whether a patient is
CC   afflicted with breast cancer by examining the correlation between the
CC   expression of certain markers and the cancerous state of breast cells.
CC   The polynucleotides and encoded polypeptides are potential markers for
CC   detecting, diagnosing, monitoring, characterising treating and
CC   potentially preventing breast cancer. The polynucleotides and encoded
CC   polypeptides are also useful for isolating compounds with cytostatic
CC   activity.
XX
SQ   Sequence 189 BP; 54 A; 51 C; 34 G; 50 T; 0 other;

  Query Match             18.0%;  Score 180.4;  DB 22;  Length 189;
  Best Local Similarity   99.5%;  Pred. No. 5.7e-48;
  Matches  181;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy     418 GTACCAGGACCTCTAACTCCCCCTGACACAGAGCAATTAGACTCTCATAACAATGGTATC 477
           |||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||||||
Db       3 GTACCAGGACCTCTAACTCCCCCTGACACAGAGCAATTAGACTCCCATAACAATGGTATC 62

Qy     478 AATTATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAAC 537
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      63 AATTATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAAC 122

Qy     538 TGCAGTTGCCTTGCAGTTTGATCCCAAGCATGGTTGAGTTACCATAAAAAAATTATGTAC 597
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     123 TGCAGTTGCCTTGCAGTTTGATCCCAAGCATGGTTGAGTTACCATAAAAAAATTATGTAC 182

Qy     598 CT 599
           ||
Db     183 CT 184


RESULT 9
AAL18160
ID   AAL18160 standard; cDNA; 189 BP.
XX
AC   AAL18160;
XX
DT   07-DEC-2001  (first entry)
XX
DE   Human breast cancer expressed polynucleotide 10617.
XX
KW   Human; breast cancer; cell marker; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200151628-A2.
XX
PD   19-JUL-2001.
XX
PF   10-JAN-2001; 2001WO-US00798.
XX
PR   14-JAN-2000; 2000US-0176077.
PR   14-MAR-2000; 2000US-0189167.
PR   24-MAR-2000; 2000US-0192099.
PR   29-MAR-2000; 2000US-0193480.
PR   15-MAY-2000; 2000US-0205230.
PR   09-JUN-2000; 2000US-0211315.
PR   25-JUL-2000; 2000US-0220534.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lillie J,  Xu Y,  Wang Y,  Steinmann K;
XX
DR   WPI; 2001-451856/48.
XX
PT   New peptide useful as a marker for the diagnosis of breast cancer  -
XX
PS   Claim 1; Page 1897; 3695pp; English.
XX
CC   The invention relates to human breast cancer expressed polynucleotides
CC   (AAL07544-AAL26789) and methods of assessing whether a patient is
CC   afflicted with breast cancer by examining the correlation between the
CC   expression of certain markers and the cancerous state of breast cells.
CC   The polynucleotides and encoded polypeptides are potential markers for
CC   detecting, diagnosing, monitoring, characterising treating and
CC   potentially preventing breast cancer. The polynucleotides and encoded
CC   polypeptides are also useful for isolating compounds with cytostatic
```

```
CC   activity.
XX
SQ   Sequence 189 BP; 54 A; 51 C; 34 G; 50 T; 0 other;

  Query Match             18.0%;  Score 180.4;  DB 22;  Length 189;
  Best Local Similarity   99.5%;  Pred. No. 5.7e-48;
  Matches  181;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy    418 GTACCAGGACCTCTAACTCCCCCTGACACAGAGCAATTAGACTCTCATAACAATGGTATC 477
          ||||||||||||||||||||||||||||||||||||||||||| ||||||||||||||
Db      3 GTACCAGGACCTCTAACTCCCCCTGACACAGAGCAATTAGACTCCCATAACAATGGTATC 62

Qy    478 AATTATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAAC 537
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     63 AATTATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAAC 122

Qy    538 TGCAGTTGCCTTGCAGTTTGATCCCAAGCATGGTTGAGTTACCATAAAAAAAATTATGTAC 597
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    123 TGCAGTTGCCTTGCAGTTTGATCCCAAGCATGGTTGAGTTACCATAAAAAAAATTATGTAC 182

Qy    598 CT 599
          ||
Db    183 CT 184


RESULT 10
AAL19385
ID   AAL19385 standard; cDNA; 184 BP.
XX
AC   AAL19385;
XX
DT   07-DEC-2001  (first entry)
XX
DE   Human breast cancer expressed polynucleotide 11842.
XX
KW   Human; breast cancer; cell marker; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200151628-A2.
XX
PD   19-JUL-2001.
XX
PF   10-JAN-2001; 2001WO-US00798.
XX
PR   14-JAN-2000; 2000US-0176077.
PR   14-MAR-2000; 2000US-0189167.
PR   24-MAR-2000; 2000US-0192099.
PR   29-MAR-2000; 2000US-0193480.
PR   15-MAY-2000; 2000US-0205230.
PR   09-JUN-2000; 2000US-0211315.
PR   25-JUL-2000; 2000US-0220534.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lillie J,  Xu Y,  Wang Y,  Steinmann K;
XX
DR   WPI; 2001-451856/48.
XX
PT   New peptide useful as a marker for the diagnosis of breast cancer -
XX
PS   Claim 1; Page 2104; 3695pp; English.
XX
CC   The invention relates to human breast cancer expressed polynucleotides
CC   (AAL07544-AAL26789) and methods of assessing whether a patient is
CC   afflicted with breast cancer by examining the correlation between the
CC   expression of certain markers and the cancerous state of breast cells.
CC   The polynucleotides and encoded polypeptides are potential markers for
CC   detecting, diagnosing, monitoring, characterising treating and
CC   potentially preventing breast cancer. The polynucleotides and encoded
CC   polypeptides are also useful for isolating compounds with cytostatic
CC   activity.
XX
SQ   Sequence 184 BP; 54 A; 49 C; 32 G; 49 T; 0 other;

  Query Match             17.9%;  Score 178.8;  DB 22;  Length 184;
  Best Local Similarity   98.9%;  Pred. No. 1.8e-47;
  Matches  180;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy    418 GTACCAGGACCTCTAACTCCCCCTGACACAGAGCAATTAGACTCTCATAACAATGGTATC 477
          ||||||||||||||||||||||||||||||||||||||||||| ||||||||||||||
Db      3 GTACCAGGACCTCTAACTCCCCCTGACACAGAGCAATTAGACTCCCATAACAATGGTATC 62

Qy    478 AATTATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAAC 537
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     63 AATTATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAAC 122

Qy    538 TGCAGTTGCCTTGCAGTTTGATCCCAAGCATGGTTGAGTTACCATAAAAAAAATTATGTAC 597
          ||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||||
Db    123 TGCAGTTGCCTTGCAGTTTGATCCCAAGCATGGCTGAGTTACCATAAAAAAAATTATGTAC 182

Qy    598 CT 599
          ||
Db    183 CT 184


RESULT 11
AAL26090
ID   AAL26090 standard; cDNA; 176 BP.
XX
AC   AAL26090;
XX
DT   07-DEC-2001  (first entry)
XX
DE   Human breast cancer expressed polynucleotide 18547.
XX
KW   Human; breast cancer; cell marker; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200151628-A2.
XX
PD   19-JUL-2001.
XX
PF   10-JAN-2001; 2001WO-US00798.
XX
PR   14-JAN-2000; 2000US-0176077.
PR   14-MAR-2000; 2000US-0189167.
PR   24-MAR-2000; 2000US-0192099.
PR   29-MAR-2000; 2000US-0193480.
PR   15-MAY-2000; 2000US-0205230.
PR   09-JUN-2000; 2000US-0211315.
PR   25-JUL-2000; 2000US-0220534.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lillie J,  Xu Y,  Wang Y,  Steinmann K;
XX
DR   WPI; 2001-451856/48.
XX
PT   New peptide useful as a marker for the diagnosis of breast cancer -
XX
PS   Claim 1; Page 3419; 3695pp; English.
XX
CC   The invention relates to human breast cancer expressed polynucleotides
CC   (AAL07544-AAL26789) and methods of assessing whether a patient is
CC   afflicted with breast cancer by examining the correlation between the
CC   expression of certain markers and the cancerous state of breast cells.
CC   The polynucleotides and encoded polypeptides are potential markers for
CC   detecting, diagnosing, monitoring, characterising treating and
CC   potentially preventing breast cancer. The polynucleotides and encoded
CC   polypeptides are also useful for isolating compounds with cytostatic
CC   activity.
XX
SQ   Sequence 176 BP; 52 A; 46 C; 30 G; 48 T; 0 other;
```

```
  Query Match            17.4%;  Score 174.4;  DB 22;  Length 176;
  Best Local Similarity   99.4%;  Pred. No. 4.8e-46;
  Matches  175;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy    420 ACCAGGACCTCTAACTCCCCCTGACACAGAGCAATTAGACTCTCATAACAATGGTATCAA 479
          ||||||||||||||||||||||||||||||||||||||| ||||||||||||||||
Db      1 ACCAGGACCTCTAACTCCCCCTGACACAGAGCAATTAGACTCCCATAACAATGGTATCAA 60

Qy    480 TTATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAACTG 539
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     61 TTATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAACTG 120

Qy    540 CAGTTGCCTTGCAGTTTGATCCCAAGCATGGTTGAGTTACCATAAAAAAATTATGT 595
          ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 CAGTTGCCTTGCAGTTTGATCCCAAGCATGGTTGAGTTACCATAAAAAAATTATGT 176


RESULT 12
AAL08998
ID   AAL08998 standard; cDNA; 200 BP.
XX
AC   AAL08998;
XX
DT   07-DEC-2001  (first entry)
XX
DE   Human breast cancer expressed polynucleotide 1455.
XX
KW   Human; breast cancer; cell marker; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200151628-A2.
XX
PD   19-JUL-2001.
XX
PF   10-JAN-2001; 2001WO-US00798.
XX
PR   14-JAN-2000; 2000US-0176077.
PR   14-MAR-2000; 2000US-0189167.
PR   24-MAR-2000; 2000US-0192099.
PR   29-MAR-2000; 2000US-0193480.
PR   15-MAY-2000; 2000US-0205230.
PR   09-JUN-2000; 2000US-0211315.
PR   25-JUL-2000; 2000US-0220534.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lillie J,  Xu Y,  Wang Y,  Steinmann K;
XX
DR   WPI; 2001-451856/48.
XX
PT   New peptide useful as a marker for the diagnosis of breast cancer  -
XX
PS   Claim 1; Page 306; 3695pp; English.
XX
CC   The invention relates to human breast cancer expressed polynucleotides
CC   (AAL07544-AAL26789) and methods of assessing whether a patient is
CC   afflicted with breast cancer by examining the correlation between the
CC   expression of certain markers and the cancerous state of breast cells.
CC   The polynucleotides and encoded polypeptides are potential markers for
CC   detecting, diagnosing, monitoring, characterising treating and
CC   potentially preventing breast cancer. The polynucleotides and encoded
CC   polypeptides are also useful for isolating compounds with cytostatic
CC   activity.
XX
SQ   Sequence 200 BP; 54 A; 54 C; 38 G; 50 T; 4 other;

  Query Match            17.2%;  Score 171.8;  DB 22;  Length 200;
  Best Local Similarity   96.6%;  Pred. No. 3.6e-45;
  Matches  173;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy    421 CCAGGACCTCTAACTCCCCCTGACACAGAGCAATTAGACTCTCATAACAATGGTATCAAT 480
          |  ||||||||||||||||||||||||||||||||||||| ||||||||||||||||||
Db     22 CANNGACCTCTAACTCCCCCTGACACAGAGCAATTAGACTCCCATAACAATGGTATCAAT 81

Qy    481 TATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAACTGC 540
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     82 TATACCACTCCATTGGAGGGACTTCCTTTATGTGTCACCCAGGATACATTGCTCAACTGC 141

Qy    541 AGTTGCCTTGCAGTTTGATCCCAAGCATGGTTGAGTTACCATAAAAAAATTATGTACCT 599
          |||||||||||| |||||||||||||||| ||||||||||||||||||||||||||||
Db    142 AGTTGCCTTGCANTTTGATCCCAAGCATGGNTGAGTTACCATAAAAAAATTATGTACCT 200


RESULT 13
ABL80406
ID   ABL80406 standard; cDNA; 273 BP.
XX
AC   ABL80406;
XX
DT   17-MAY-2002  (first entry)
XX
DE   Human ovarian cancer related cDNA clone SEQ ID NO:3384.
XX
KW   Human; ovarian cancer; ovarian tumour; cytostatic; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192581-A2.
XX
PD   06-DEC-2001.
XX
PF   29-MAY-2001; 2001WO-US17756.
XX
PR   26-MAY-2000; 2000US-207484P.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Algate PA,  Harlocker SL,  Jones R;
XX
DR   WPI; 2002-122075/16.
XX
PT   Composition for therapy and diagnosis of ovarian cancer comprising
PT   polypeptide of a ovarian tumor polypeptide, polynucleotide encoding
PT   polypeptide, antibody specific to polypeptide or T cell expressing
PT   polypeptide  -
XX
PS   Claim 1; SEQ ID 3384; 489pp; English.
XX
CC   The present invention describes a composition (I) comprising: carriers
CC   and immunostimulants; and a polypeptide (II) of a ovarian tumour
CC   polypeptide encoded by a polynucleotide (III) having a cDNA sequence
CC   (S1) from the 10912 nucleotide sequences as given in ABL77023 to
CC   ABL87934, (III) encoding (II) having a sequence (S2), a T cell
CC   population of (II), or antigen presenting cells that express (II).
CC   (I) has cytostatic activity. An oligonucleotide (IV) that hybridises to
CC   (S1) can be used for detecting ovarian cancer in a patient's biological
CC   sample preferably serum or ovarian tissue. The method comprises
CC   contacting a biological sample from a patient with (IV), detecting the
CC   amount of polynucleotide hybridising to (IV) and comparing the amount to
CC   a predetermined cutoff value and thereby detecting ovarian cancer in the
CC   patient, where the amount of polynucleotide hybridising to (IV) is
CC   detected preferably by polymerase chain reaction (PCR). (I) comprising
CC   (III) and/or (II) is useful for stimulating and/or expanding T cells
CC   specific for an ovarian tumour protein comprising contacting T cells
CC   with (III) or (II). (III) is useful in design and preparation of
CC   ribozyme molecules for inhibiting expression of the tumour polypeptides
CC   and proteins in tumour cells; and to isolate a full length gene from a
CC   suitable library e.g., a tumour cDNA library using well known
CC   techniques.
XX
SQ   Sequence 273 BP; 72 A; 67 C; 56 G; 77 T; 1 other;

  Query Match            16.5%;  Score 164.8;  DB 24;  Length 273;
  Best Local Similarity   82.5%;  Pred. No. 7.9e-43;
  Matches  212;  Conservative    0;  Mismatches   43;  Indels    2;  Gaps    2;
```

```
Qy    254 CCTGACTCCATGTTTATGGCCATGCTAGCTGTAATATCCTGTGCAGTATGATTTTTCTGT 313
          ||||| ||||||||  ||||||||| ||||  ||||||||||||||||||| |||| ||||
Db      9 CCTGATTCCATGTTCTTGGCCATGTTAGCCATAATATCCTGTGCAGTATGTTTTTCCTGT 68

Qy    314 GCAGAAGCAAAAACATATTGGGCATATTTTCCTAACCCACCGGTAGTGTGA-TCATACTC 372
          ||||| ||||||||||||||||||||| | || || || || | ||| |||  ||||||
Db     69 GCAGAGGCAAAAACATATTGGGCATATGTNCCCAAGCCCCCAGCAGTATGACCCATACTT 128

Qy    373 TGAAGCAGCACTCCTCCTGAGATATATCATGATCAAGGAGCATCAGTACCA-GGACCTCT 431
          || ||   |||||||||| |||| |||||||||  |||||||||   |   ||| |||| ||
Db    129 TGGAGTGACACTCCTCCTAAGATTTATCATGATTAAGGAGCATGGGCTCCAGGGACCCCT 188

Qy    432 AACTCCCCCTGACACAGAGCAATTAGACTCTCATAACAATGGTATCAATTATACCACTCC 491
          |||||| ||||||| ||| || |||||||||| || ||||  || |||||||||  |||
Db    189 AACTCCACCTGACATAGAACAGTTAGACTCTCAGAATAATGTCATTAATTATACCGTTCC 248

Qy    492 ATTGGAGGGACTTCCTT 508
          |||||| ||||||||||
Db    249 ATTGGAAGGACTTCCTT 265
```

RESULT 14
AAS92505
ID AAS92505 standard; cDNA; 660 BP.
XX
AC AAS92505;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #28309.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG28318.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 28309; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 660 BP; 172 A; 168 C; 169 G; 151 T; 0 other;

```
  Query Match             15.3%;  Score 152.8;  DB 23;  Length 660;
  Best Local Similarity   82.5%;  Pred. No. 1e-38;
  Matches  175;  Conservative    0;  Mismatches   37;  Indels    0;  Gaps    0;

Qy     30 AAGTTGTGTGCGACCATGGAATGGGAGACTGGAGGGATACATGGATCCCAACTACAGGCC 89
          | |||| |    | | ||||||||||||||||||||  ||||||||||||    | ||
Db    353 ATGTTGAGGTGCATCTTGGAATGGGAGACTGGAGGGACCCATGGATCCCAACCCTGGACC 412

Qy     90 CAGCTCCTCCAGTATGAGCCATGAGCCAGTTGAATCTGAATGTGAAGATGGAATGAAGAC 149
            | ||| ||||||  | ||||||||||||||||||||||| |||||||||| || |||
Db    413 TGGTTCCCCCAGTACAATCCATGAGCCAGTTGAATCTGAATGCGAAGATGGAACGACGAC 472

Qy    150 CGACGAGAGTCACACTGACGTCAACCCTCATAACATGGGGTCAGATCAAGAAAACCACAC 209
           ||| |||||||  ||||| ||||||| |||||||||||| | ||||||||||||||||
Db    473 TGACCAGAGTCATGCTGACATCAACCCCCATAACATGGGGACTGATCAAGAAAACCACAC 532

Qy    210 CAGAAGCTGAGAAACTGGTGTAGTGCCAGGGT 241
          ||||||||||||||| || ||||||||||||
Db    533 AGGAAGCTGAGAAACTGCTGGAGTGCCAGGGT 564
```

RESULT 15
AAH15033
ID AAH15033 standard; cDNA; 2652 BP.
XX
AC AAH15033;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human cDNA sequence SEQ ID NO:13009.
XX
KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-0116126.
XX
PR 29-JUL-1999; 99JP-0248036.
PR 27-AUG-1999; 99JP-0300253.
PR 11-JAN-2000; 2000JP-0118776.
PR 02-MAY-2000; 2000JP-0183767.
PR 09-JUN-2000; 2000JP-0241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602
PT full-length cDNAs defined in the specification, and for the detection
PT and/or diagnosis of the abnormality of the proteins encoded by the
PT full-length cDNAs -
XX
PS Claim 8; SEQ ID 13009; 2537pp + CD ROM; English.
XX
CC The present invention describes primer sets for synthesising 5602

CC full-length cDNAs defined in the specification. Where a primer set
CC comprises: (a) an oligo-dT primer and an oligonucleotide complementary
CC to the complementary strand of a polynucleotide which comprises one of
CC the 5602 nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in
CC the specification. The primer sets can be used in antisense therapy and
CC in gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to
CC AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632
CC represent oligonucleotides, all of which are used in the exemplification
CC of the present invention.
XX
SQ Sequence 2652 BP; 818 A; 567 C; 600 G; 667 T; 0 other;

Query Match 15.2%; Score 152.6; DB 22; Length 2652;
Best Local Similarity 68.1%; Pred. No. 2.5e-38;
Matches 228; Conservative 0; Mismatches 104; Indels 3; Gaps 1;

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Qy       1 GGAGATGGATAAACCGTGTGAGTGCCCTCAAGTTGTGTGCGACCATGGAATGGGAGACTG 60
           ||||||||| || ||||||| |||||||||| ||||||| ||||||||||||||||||||
Db    1950 GGAGATGGACAAGCCGTGTGGGTGCCCTCAAGGTGTGTGCAACCATGGAATGGGAGACTG 2009

Qy      61 GAGGGATACATGGATCCCAACTACAGGCCCAGCTCCTCCAGTATGAGCCATGAGCCAGTT 120
           |||| |  || ||   ||||| |  || || |  ||||  || ||||||||||||||| |
Db    2010 GAGGAACCCAGGGTGGCCAACCATGGGTCCGGTCCCTCTGGTGTGAGCCATGAGCCAGCT 2069

Qy     121 GAATCTGAATGTGAAGATGGAATGAAGACCGACGAGAGTCACACTGACGTCAACCCTCAT 180
           ||  |||| || ||||| |||  |||| ||||| | |||||   |||| |||||||| |||
Db    2070 GAGCCTGAGTGCGAAGACGGAGAGAAGGCCGACCACAGTCA---TGACATCAACCCCCAT 2126

Qy     181 AACATGGGGTCAGATCAAGAAAACCACACCAGAAGCTGAGAAACTGGTGTAGTGCCAGGG 240
           ||| ||||| ||  |||||||||||||||  || ||||||||||  || ||  ||||||
Db    2127 AACCTGGGGACAACTCAAGAAAACCACACAGGAGGCTGAGAAACTACTGGAGCACCAGGG 2186

Qy     241 TCAGGCAAAAACCCCTGACTCCATGTTTATGGCCATGCTAGCTGTAATATCCTGTGCAGT 300
            ||| |  ||    ||       |  |||| |   ||  |    ||  ||  |
Db    2187 ACAGTCTGTAAAGTTGGATGGACCATCAATGGGAAAATGAGAGCTGCCCACCCTGGCCTT 2246

Qy     301 ATGATTTTTCTGTGCAGAAGCAAAAACATATTGGG 335
           |   |  |||  |  | |   ||| | | |   ||
Db    2247 ACACTCCTTCAATTAATACATAAACAGAAAGGAGG 2281
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Job time : 181.952 secs

GenCore version 5.1.3

OM nucleic - nucleic search, using sw model

Run on: December 24, 2002, 16:23:56 ; Search time 165.952 Seconds
(without alignments)
13583.723 Million cell updates/sec

Title: US-09-708-724A-3_COPY_99000_100000
Perfect score: 1001
Sequence: 1 tggcacgcgcctgtagtccc.....tttttatccaccatcactaa 1001

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	425.2	42.5	2750	21	AAC69110	Human secreted pro
	2	424	42.4	2752	21	AAC69119	Human secreted pro
c	3	314	31.4	2391	22	AAI92576	Human polynucleoti
c	4	121.2	12.1	2266	22	AAK89548	Human digestive sy
c	5	119	11.9	16161	22	AAK83469	Human immune/haema
c	6	118.4	11.8	1031	22	AAK82137	Human immune/haema
c	7	117.4	11.7	17792	22	AAS32727	Human genomic DNA
c	8	117.4	11.7	17792	22	AAS36099	Human cardiovascul
	9	117	11.7	87350	18	AAX83003	Human WRN genomic
c	10	116.8	11.7	1039	22	AAK62290	Human immune/haema
c	11	116.8	11.7	16106	22	AAK83468	Human immune/haema
c	12	115.4	11.5	666	22	AAK64559	Human immune/haema
	13	114.6	11.4	929	21	AAC59766	Human secreted pro
	14	114.2	11.4	2361	22	ABA21235	Human nervous syst
c	15	114	11.4	30620	22	AAK66931	Human immune/haema
c	16	114	11.4	325791	22	AAS43104	Human Oestrogen re
c	17	113.8	11.4	734	22	ABA16869	Human nervous syst
c	18	113.8	11.4	734	22	ABA16871	Human nervous syst
c	19	113.8	11.4	734	22	ABA20112	Human nervous syst
c	20	113.8	11.4	734	22	ABA20114	Human nervous syst
	21	113.8	11.4	1184	21	AAA26411	Human secreted pro
c	22	113.8	11.4	4185	22	AAS21277	Human cDNA sequenc
	23	113.8	11.4	11987	22	AAL07284	Human reproductive
	24	113.8	11.4	11987	23	ABL98830	Human testicular a
c	25	113.8	11.4	46366	22	AAK82098	Human immune/haema
c	26	113.8	11.4	227968	24	ABK83497	Human cDNA differe
c	27	113.4	11.3	6216	24	ABN83166	Human PER2 S662GG
c	28	113.4	11.3	6218	20	AAX58987	Human transcriptio
c	29	113.4	11.3	6219	24	ABN83167	Human PER2 cDNA.
	30	113.4	11.3	9039	22	AAK75933	Human immune/haema
	31	113.4	11.3	9039	22	AAK85246	Human immune/haema
c	32	113.4	11.3	35414	21	AAD00147	TR12 related DNA-1
	33	112.6	11.2	590	24	ABN63415	Human cancer relat
c	34	112.6	11.2	20835	22	AAK86765	Human immune/haema
c	35	112.6	11.2	25806	22	AAK86766	Human immune/haema
	36	112.4	11.2	2147	23	ABK42851	Genomic sequence #
c	37	112.2	11.2	6708	22	ABA07966	Human ovarian and
c	38	112.2	11.2	6708	22	AAL03878	Human reproductive
	39	112.2	11.2	32082	22	AAL06991	Human reproductive
c	40	112.2	11.2	32186	22	ABA21319	Human nervous syst
c	41	112.2	11.2	32186	22	AAK89692	Human digestive sy
c	42	112.2	11.2	99014	24	ABN96931	Gene #3429 used to
	43	112	11.2	13493	22	AAK74889	Human immune/haema
c	44	112	11.2	13493	22	AAK82626	Human immune/haema
	45	112	11.2	35973	24	ABK13076	Human amyloid beta

ALIGNMENTS

RESULT 1
AAC69110
ID AAC69110 standard; DNA; 2750 BP.
XX
AC AAC69110;
XX
DT 31-JAN-2001 (first entry)
XX
DE Human secreted protein gene 27 clone HOUHD63.
XX
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW neurological disease; infection; human; secreted protein; ss.
XX
OS Homo sapiens.
XX
PN WO200055371-A1.
XX
PD 21-SEP-2000.
XX
PF 16-MAR-2000; 2000WO-US06783.
XX
PR 18-MAR-1999; 99US-0125055.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Ruben SM, Ni J, Ebner R, Rosen CA, Shi Y, Birse C, Florence K;
PI Komatsoulis G, Lafleur DW, Moore PA, Olsen HS, Young PE;
XX
DR WPI; 2000-594448/56.

```
DR   P-PSDB; AAB38010.
XX
PT   New nucleic acid molecules encoding 27 human secreted proteins for
PT   diagnosing, preventing, treating or ameliorating medical conditions and
PT   used as food additives or preservatives -
XX
PS   Claim 1; Page 382-383; 453pp; English.
XX
CC   The invention relate to the isolation of genes AAC69084-C69119 encoding
CC   27 human secreted proteins AAB37984-B38019. The genes can be used to
CC   generate fusion proteins by linking to the gene for the human
CC   immunoglobulin G Fc portion (AAC69075) for increasing the stability of
CC   the fusion protein as compared to the human protein only. The genes and
CC   proteins are useful for preventing, ameliorating or treating medical
CC   conditions, e.g. by protein or gene therapy. The genes are isolated
CC   from a range of human tissues disclosed in the specification. The
CC   nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC   the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC   and ovarian cancer, and other cancers of the adrenal gland, bone, bone
CC   marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC   (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC   haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC   disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC   colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d)
CC   wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC   epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC   and parasitic infections.
XX
SQ   Sequence 2750 BP; 803 A; 526 C; 593 G; 816 T; 12 other;

  Query Match             42.5%;  Score 425.2;  DB 21;  Length 2750;
  Best Local Similarity   79.0%;  Pred. No. 6.1e-109;
  Matches  591;  Conservative    1;  Mismatches  124;  Indels   32;  Gaps    6;

Qy    284 GGTTTTGCGGTCGCCGTGGTTGCTGTTCCTGCTGCCACAGGTTGGAACTGGAGATGCCTC 343
          | |  ||||||||||||  |||||||  |||||||||| ||| | ||||  ||| | |||||
Db    158 GCTCCTGCGGTCGCCGCCGTTGCTGCTCCTGCTGCCGCAGCTCGGAATCGGAAACGCCTC 217

Qy    344 TTCCTTCTCTCAGGACAGAACCATG-AGCCTAGCGGCAGCGCCGGTTCGCGAAGCTCCCC 402
           ||||  ||||||||  ||||||||||  | ||  |||||||||  |||  |||||  ||||||
Db    218 GTCCTGCTCTCAGGCCAGAACCATGAACCCGGGCGGCAGCGGCGGCGCGCGATGCTCCCT 277

Qy    403 CTCCGCCAACGGGCGCCTCCTCAGAGCCGTCC--GTGCCCGCCCTGCCGGGAGCTGACCC 460
          |||  |||  | |  |||||  ||        | | |    |  ||  ||  ||||  |||||  ||  ||
Db    278 CTCGGCCGAGGTGCGCCGCCGTCAGTGCCTGCAGCTTTCCACCGTGCCTGGAGCCGAKCC 337

Qy    461 GCAGCGCAGTGCAGAGTTGCTCCTGTTGGCGGTGACCAGGGAGGGACTGGAGCGGCGGAT 520
          |||||||||    ||  ||||||||||||||||  | ||  ||||||||||||||||||  |
Db    338 GCAGCGCAGSAACGAATTGCTCCTGTTGGCGGCGGCCGGGGAGGGACTGGAGCGGCAGGA 397

Qy    521 CATCTCCAGGAAGCGGGCTGAGTAGGAACTGCAGCCGC-----------CACATCCTCTC 569
          |  ||  ||  ||  |  |  ||  ||  ||||  |  ||||||||           |||  ||||||
Db    398 CCTCCCCGGGGACCCAGCGAAGGAGGAGCCGCAGCCGCCGCCCCAGCATCACGTCCTCTA 457

Qy    570 TTTACCCGGGGATGTGCAGGATTACCGTGAAATCATGACTCGTCATCCTGCGAATTACCA 629
          |||  ||  ||||||||||||  ||||||  ||||||  ||||||||||||||||  ||||||  ||
Db    458 TTTCCCTGGGGATGTGCAGAATTACCATGAAATTATGACTCGTCATCCTGAGAATTATCA 517

Qy    630 ATGGGAAAATTGGAGTCTAGAAATTATTGCCTCCATTTTAGCCCACCGGTTCCCCAGTAG 689
          |||||||||  ||||||||||||  |  ||||  ||||||||||||||||||||||||  |||
Db    518 ATGGGAAAACTGGAGTCTAGAAAATGTTGCTACCATTTTAGCCCACCGGTTCCCCAATAG 577

Qy    690 CTGTATTGGGGTGATGAAGTGCTCCGGAA-----------CAAATGCGCTGCCATGATAG 738
           | ||||  |||||||  ||  ||  |||  |||            :|  |  |||||  ||||  |
Db    578 TTATATTTGGGTGATAAAATGTTCCCGAATGCATTTGCACWWATTCAGCTGCTATGACAA 637

Qy    739 TTTTCTGAAAAGTAACATGTTTGGTTTCCCAGAACACAATACAGACTCTGGAGCTTTTAA 798
          ||||  ||||||||||||||||||||  ||||||||||||||  ||||  ||||||||||||
Db    638 TTTTGTGAAAAGTAACATGTTTGGTGCCCCAGAACACAATACTGACTTTGGAGCTTTTAA 697

Qy    799 GCACCTTTATATGTTATTAGTTAATGCT-----TTTAAGTCAGAGTAGTTTATCAAAGGA 853
          |||||||||||||||||||||||||||||     ||||||||||| |||||||||||||  |
Db    698 GCACCTTTATATGTTATTAGTTAATGCTTTTAATTTAAGTCAGAATAGTTTATCAAAGAA 757

Qy    854 AAATTTGAATGATTGGAATAAGGACTCCACAGCATCTAATTGTAGATGTCCAATTCTTCT 913
          ||  ||||||||  ||||||||||||||||||  ||||||||  ||||||  ||||  |  |||||
Db    758 AAGTTTGAATGTTTGGAATAAGGACTCCATAGCATCTAACTGTAGA--TCCAGTCCTTCT 815

Qy    914 CATACTACAAATCATTTCCAGGAAGGAAAAGATAGGACCTTTGAAAAATCTGATGGATCG 973
          ||||||||  |||  ||  |||||  ||  |||||  |||||||  ||||||||||||||  ||
Db    816 CATACTACGAATGGTTGCCAGGGAGAAAAAGTGAGGACCTGTGAAAAATCTGATGAGTCT 875

Qy    974 GCCATGTGTTTTTATCCACCATCACTAA 1001
          ||||||  ||||||||||||||||||||||
Db    876 GCCATGAGTTTTTATCCACCATCACTAA 903


RESULT 2
AAC69119
ID   AAC69119 standard; DNA; 2752 BP.
XX
AC   AAC69119;
XX
DT   31-JAN-2001  (first entry)
XX
DE   Human secreted protein gene 27 clone HPJBF63.
XX
KW   Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW   antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW   vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW   cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; human; secreted protein; ss.
XX
OS   Homo sapiens.
XX
PN   WO200055371-A1.
XX
PD   21-SEP-2000.
XX
PF   16-MAR-2000; 2000WO-US06783.
XX
PR   18-MAR-1999;   99US-0125055.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ruben SM,  Ni J,  Ebner R,  Rosen CA,  Shi Y,  Birse C,  Florence K;
PI   Komatsoulis G,  Lafleur DW,  Moore PA,  Olsen HS,  Young PE;
XX
DR   WPI; 2000-594448/56.
DR   P-PSDB; AAB38019.
XX
PT   New nucleic acid molecules encoding 27 human secreted proteins for
PT   diagnosing, preventing, treating or ameliorating medical conditions and
PT   used as food additives or preservatives -
XX
PS   Claim 1; Page 390-391; 453pp; English.
XX
CC   The invention relate to the isolation of genes AAC69084-C69119 encoding
CC   27 human secreted proteins AAB37984-B38019. The genes can be used to
CC   generate fusion proteins by linking to the gene for the human
CC   immunoglobulin G Fc portion (AAC69075) for increasing the stability of
CC   the fusion protein as compared to the human protein only. The genes and
CC   proteins are useful for preventing, ameliorating or treating medical
CC   conditions, e.g. by protein or gene therapy. The genes are isolated
CC   from a range of human tissues disclosed in the specification. The
CC   nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC   the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC   and ovarian cancer, and other cancers of the adrenal gland, bone, bone
CC   marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC   (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC   haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC   disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC   colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d)
CC   wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC   epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC   and parasitic infections.
```

```
XX
SQ   Sequence 2752 BP; 808 A; 530 C; 598 G; 816 T; 0 other;

 Query Match            42.4%;  Score 424;  DB 21;  Length 2752;
 Best Local Similarity  79.0%;  Pred. No. 1.3e-108;
 Matches  591;  Conservative    0;  Mismatches  125;  Indels   32;  Gaps    6;

Qy     284 GGTTTTGCGGTCGCCGTGGTTGCTGTTCCTGCTGCCACAGGTTGGAACTGGAGATGCCTC 343
           | |  ||||||||||||  |||||||  |||||||||| ||| | |||  ||| | |||||
Db     165 GCTCCTGCGGTCGCCGCCGTTGCTGCTCCTGCTGCCGCAGCTCGGAATCGGAAACGCCTC 224

Qy     344 TTCCTTCTCTCAGGACAGAACCATG-AGCCTAGCGGCAGCGCCGGTTCGCGAAGCTCCCC 402
            ||||  ||||||||  ||||||||||  | ||  |||||||||  |||  ||||| ||||||
Db     225 GTCCTGCTCTCAGGCCAGAACCATGAACCCGGGCGGCAGCGGCGGCGCGCGATGCTCCCT 284

Qy     403 CTCCGCCAACGGGCGCCTCCTCAGAGCCGTCC--GTGCCCGCCCTGCCGGGAGCTGACCC 460
           |||  |||  |  |  |||||  ||       |  |  |    |  ||  ||  ||||  |||||  ||  ||
Db     285 CTCGGCCGAGGTGCGCCGCCGTCAGTGCCTGCAGCTTTCCACCGTGCCTGGAGCCGAGCC 344

Qy     461 GCAGCGCAGTGCAGAGTTGCTCCTGTTGGCGGTGACCAGGGAGGGACTGGAGCGGCGGAT 520
           |||||||||    ||  ||||||||||||||||  |  ||  ||||||||||||||||||  |
Db     345 GCAGCGCAGCAACGAATTGCTCCTGTTGGCGGCGGCCGGGGAGGGACTGGAGCGGCAGGA 404

Qy     521 CATCTCCAGGAAGCGGGCTGAGTAGGAACTGCAGCCGC-----------CACATCCTCTC 569
           |  ||  ||  ||  |  |   ||   ||  ||||  |  ||||||||           |||  ||||||
Db     405 CCTCCCCGGGGACCCAGCGAAGGAGGAGCCGCAGCCGCCGCCCCAGCATCACGTCCTCTA 464

Qy     570 TTTACCCGGGGATGTGCAGGATTACCGTGAAATCATGACTCGTCATCCTGCGAATTACCA 629
           |||  ||  ||||||||||||  ||||||  ||||||  ||||||||||||||||  ||||||  ||
Db     465 TTTCCCTGGGGATGTGCAGAATTACCATGAAATTATGACTCGTCATCCTGAGAATTATCA 524

Qy     630 ATGGGAAAATTGGAGTCTAGAAATTATTGCCTCCATTTTAGCCCACCGGTTCCCCAGTAG 689
           |||||||||  ||||||||||||||  |  ||||  ||||||||||||||||||||||||  |||
Db     525 ATGGGAAAACTGGAGTCTAGAAAATGTTGCTACCATTTTAGCCCACCGGTTCCCCAATAG 584

Qy     690 CTGTATTGGGGTGATGAAGTGCTCCGGAA-----------CAAATGCGCTGCCATGATAG 738
            |  ||||  |||||||  ||  ||  |||  |||             ||  |  |||||  ||||  |
Db     585 TTATATTTGGGTGATAAAATGTTCCCGAATGCATTTGCACAAATTCAGCTGCTATGACAA 644

Qy     739 TTTTCTGAAAAGTAACATGTTTGGTTTCCCAGAACACAATACAGACTCTGGAGCTTTTAA 798
           ||||  ||||||||||||  |||||||  ||||||||||||||  ||||  ||||||||||||
Db     645 TTTTGTGAAAAGTAACACGTTTGGTGCCCCAGAACACAATACTGACTTTGGAGCTTTTAA 704

Qy     799 GCACCTTTATATGTTATTAGTTAATGCT-----TTTAAGTCAGAGTAGTTTATCAAAGGA 853
           |||||||||||||||||||||||||||||     ||||||||||  ||||||||||||  |
Db     705 GCACCTTTATATGTTATTAGTTAATGCTTTTAATTTAAGTCAGAATAGTTTATCAAAGAA 764

Qy     854 AAATTTGAATGATTGGAATAAGGACTCCACAGCATCTAATTGTAGATGTCCAATTCTTCT 913
           ||  |||||||  ||||||||||||||||  |||||||||  ||||||  ||||  |  |||||
Db     765 AAGTTTGAATGTTTGGAATAAGGACTCCATAGCATCTAACTGTAGA--TCCAGTCCTTCT 822

Qy     914 CATACTACAAATCATTTCCAGGAAGGAAAAGATAGGACCTTTGAAAAATCTGATGGATCG 973
           ||||||||  |||   ||  |||||  ||  |||||   |||||||  ||||||||||||||   ||
Db     823 CATACTACGAATGGTTGCCAGGGAGAAAAAGTGAGGACCTGTGAAAAATCTGATGAGTCT 882

Qy     974 GCCATGTGTTTTTATCCACCATCACTAA 1001
           ||||||  ||||||||||||||||||||||
Db     883 GCCATGAGTTTTTATCCACCATCACTAA 910


RESULT 3
AAI92576/c
ID   AAI92576 standard; cDNA; 2391 BP.
XX
AC   AAI92576;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 12636.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorders; arthritis; inflammation; ss.
XX
OS   Homo sapiens.
XX
PN   WO200164835-A2.
XX
PD   07-SEP-2001.
XX
PF   26-FEB-2001; 2001WO-US04927.
XX
PR   28-FEB-2000; 2000US-0515126.
PR   18-MAY-2000; 2000US-0577409.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT;
XX
DR   WPI; 2001-514838/56.
DR   P-PSDB; AAO12645.
XX
PT   Isolated nucleic acids and polypeptides, useful for preventing
PT   diagnosing and treating e.g. leukaemia, inflammation and immune
PT   disorders -
XX
PS   Claim 1; SEQ ID NO 12636; 1399pp + Sequence Listing; English.
XX
CC   The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC   the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 2391 BP; 766 A; 480 C; 379 G; 762 T; 4 other;

  Query Match            31.4%;  Score 314;  DB 22;  Length 2391;
  Best Local Similarity  81.1%;  Pred. No. 1e-77;
  Matches  425;  Conservative    0;  Mismatches   70;  Indels   29;  Gaps    4;

Qy     505 GACTGGAGCGGCGGATCATCTCCAGGAAGCGGGCTGAGTAGGAACTGCAGCCGC------ 558
           ||||||||||||  |  | ||  ||  ||  |  |  ||  || ||||  | ||||||||
Db    2359 GACTGGAGCGGCAGGACCTCCCCGGGGACCCAGCGAAGGAGGAGCCGCAGCCGCTTTCCC 2300

Qy     559 -----CACATCCTCTCTTTACCCGGGGATGTGCAGGATTACCGTGAAATCATGACTCGTC 613
                ||| ||||||  ||| ||  ||||||||||||  ||||||  ||||||  ||||||||||
Db    2299 TTCATCACGTCCTCTATTTCCCTGGGGATGTGCAGAATTACCATGAAATTATGACTCGTC 2240

Qy     614 ATCCTGCGAATTACCAATGGGAAAATTGGAGTCTAGAAATTATTGCCTCCATTTTAGCCC 673
           ||||||  ||||||  ||||||||||  ||||||||||||  |  ||||  ||||||||||||
Db    2239 ATCCTGAGAATTATCAATGGGAAAACTGGAGTCTAGAAAATGTTGCTACCATTTTAGCCC 2180

Qy     674 ACCGGTTCCCCAGTAGCTGTATTGGGGTGATGAAGTGCTCCGGAA-----------CAAA 722
           ||||||||||||  |||  |  ||||  |||||||  ||  ||  |||  |||             ||
Db    2179 ACCGGTTCCCCAATAGTTATATTTGGGTGATAAAATGTTCCCGAATGCATTTGCACAAAT 2120

Qy     723 TGCGCTGCCATGATAGTTTTCTGAAAAGTAACATGTTTGGTTTCCCAGAACACAATACAG 782
           |  |||||  ||||  |  ||||  ||||||||||||||||||||  ||||||||||||||  |
Db    2119 TCAGCTGCTATGACAATTTTGTGAAAAGTAACATGTTTGGTGCCCCAGAACACAATACTG 2060

Qy     783 ACTCTGGAGCTTTTAAGCACCTTTATATGTTATTAGTTAATGCT-----TTTAAGTCAGA 837
           |||  ||||||||||||||||||||||||||||||||||||||||||     ||||||||||
Db    2059 ACTTTGGAGCTTTTAAGCACCTTTATATGTTATTAGTTAATGCTTTTAATTTAAGTCAGA 2000

Qy     838 GTAGTTTATCAAAGGAAAATTTGAATGATTGGAATAAGGACTCCACAGCATCTAATTGTA 897
           ||||||||||||  |||  ||||||||  ||||||||||||||||||  |||||||||  ||||
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Db   1999 ATAGTTTATCAAAGAAAAGTTTGAATGTTTGGAATAAGGACTCCATAGCATCTAACTGTA 1940

Qy    898 GATGTCCAATTCTTCTCATACTACAAATCATTTCCAGGAAGGAAAAGATAGGACCTTTGA 957
          ||  |||| | ||||||||||||| |||  || ||||| || |||||  ||||||| |||
Db   1939 GA--TCCAGTCCTTCTCATACTACGAATGGTTGCCAGGGAGAAAAAGTGAGGACCTGTGA 1882

Qy    958 AAAATCTGATGGATCGGCCATGTGTTTTTATCCACCATCACTAA 1001
          ||||||||||  || |||||| ||||||||||||||||||||
Db   1881 AAAATCTGATGAGTCTGCCATGAGTTTTTATCCACCATCACTAA 1838
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RESULT 4
AAK89548/c
ID AAK89548 standard; DNA; 2266 BP.
XX
AC AAK89548;
XX
DT 05-NOV-2001 (first entry)
XX
DE Human digestive system antigen genomic sequence SEQ ID NO: 3124.
XX
KW Human; digestive system antigen; gene therapy; cancer; appendicitis;
KW ulcerative colitis; infection; Hirschsprung's disease; chronic colitis;
KW digestive system disorder; Meckel's diverticulum; ds.
XX
OS Homo sapiens.
XX
PN WO200155314-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US01324.
XX
PR 31-JAN-2000; 2000US-0179065.
PR 04-FEB-2000; 2000US-0180628.
PR 24-FEB-2000; 2000US-0184664.
PR 02-MAR-2000; 2000US-0186350.
PR 16-MAR-2000; 2000US-0189874.
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PR 28-JUN-2000; 2000US-0214886.
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PR 07-JUL-2000; 2000US-0216647.
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PR 14-JUL-2000; 2000US-0218290.
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PR 14-AUG-2000; 2000US-0224518.
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PR 14-AUG-2000; 2000US-0225214.
PR 14-AUG-2000; 2000US-0225266.
PR 14-AUG-2000; 2000US-0225267.
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PR 14-AUG-2000; 2000US-0225270.
PR 14-AUG-2000; 2000US-0225447.
PR 14-AUG-2000; 2000US-0225757.
PR 14-AUG-2000; 2000US-0225758.
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PR 23-AUG-2000; 2000US-0227009.
PR 30-AUG-2000; 2000US-0228924.
PR 01-SEP-2000; 2000US-0229287.
PR 01-SEP-2000; 2000US-0229343.
PR 01-SEP-2000; 2000US-0229344.
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PR 05-SEP-2000; 2000US-0229509.
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PR 06-SEP-2000; 2000US-0230437.
PR 06-SEP-2000; 2000US-0230438.
PR 08-SEP-2000; 2000US-0231242.
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PR 08-SEP-2000; 2000US-0231244.
PR 08-SEP-2000; 2000US-0231413.
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PR 12-SEP-2000; 2000US-0231968.
PR 14-SEP-2000; 2000US-0232397.
PR 14-SEP-2000; 2000US-0232398.
PR 14-SEP-2000; 2000US-0232399.
PR 14-SEP-2000; 2000US-0232400.
PR 14-SEP-2000; 2000US-0232401.
PR 14-SEP-2000; 2000US-0233063.
PR 14-SEP-2000; 2000US-0233064.
PR 14-SEP-2000; 2000US-0233065.
PR 21-SEP-2000; 2000US-0234223.
PR 21-SEP-2000; 2000US-0234274.
PR 25-SEP-2000; 2000US-0234997.
PR 25-SEP-2000; 2000US-0234998.
PR 26-SEP-2000; 2000US-0235484.
PR 27-SEP-2000; 2000US-0235834.
PR 27-SEP-2000; 2000US-0235836.
PR 29-SEP-2000; 2000US-0236327.
PR 29-SEP-2000; 2000US-0236367.
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PR 29-SEP-2000; 2000US-0236369.
PR 29-SEP-2000; 2000US-0236370.
PR 02-OCT-2000; 2000US-0236802.
PR 02-OCT-2000; 2000US-0237037.
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PR 02-OCT-2000; 2000US-0237039.
PR 02-OCT-2000; 2000US-0237040.
PR 13-OCT-2000; 2000US-0239935.
PR 13-OCT-2000; 2000US-0239937.
PR 20-OCT-2000; 2000US-0240960.
PR 20-OCT-2000; 2000US-0241221.
PR 20-OCT-2000; 2000US-0241785.
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PR 20-OCT-2000; 2000US-0241787.
PR 20-OCT-2000; 2000US-0241808.
PR 20-OCT-2000; 2000US-0241809.
PR 20-OCT-2000; 2000US-0241826.
PR 01-NOV-2000; 2000US-0244617.
PR 08-NOV-2000; 2000US-0246474.
PR 08-NOV-2000; 2000US-0246475.
PR 08-NOV-2000; 2000US-0246476.
PR 08-NOV-2000; 2000US-0246477.
PR 08-NOV-2000; 2000US-0246478.
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PR 08-NOV-2000; 2000US-0246525.
PR 08-NOV-2000; 2000US-0246526.
PR 08-NOV-2000; 2000US-0246527.
PR 08-NOV-2000; 2000US-0246528.
PR 08-NOV-2000; 2000US-0246532.
PR 08-NOV-2000; 2000US-0246609.
PR 08-NOV-2000; 2000US-0246610.
PR 08-NOV-2000; 2000US-0246611.
PR 08-NOV-2000; 2000US-0246613.
PR 17-NOV-2000; 2000US-0249207.
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PR 17-NOV-2000; 2000US-0249209.
PR 17-NOV-2000; 2000US-0249210.
PR 17-NOV-2000; 2000US-0249211.
PR 17-NOV-2000; 2000US-0249212.
PR 17-NOV-2000; 2000US-0249213.
PR 17-NOV-2000; 2000US-0249214.
PR 17-NOV-2000; 2000US-0249215.

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PR   17-NOV-2000; 2000US-0249216.
PR   17-NOV-2000; 2000US-0249217.
PR   17-NOV-2000; 2000US-0249218.
PR   17-NOV-2000; 2000US-0249244.
PR   17-NOV-2000; 2000US-0249245.
PR   17-NOV-2000; 2000US-0249264.
PR   17-NOV-2000; 2000US-0249265.
PR   17-NOV-2000; 2000US-0249297.
PR   17-NOV-2000; 2000US-0249299.
PR   17-NOV-2000; 2000US-0249300.
PR   01-DEC-2000; 2000US-0250160.
PR   01-DEC-2000; 2000US-0250391.
PR   05-DEC-2000; 2000US-0251030.
PR   05-DEC-2000; 2000US-0251988.
PR   05-DEC-2000; 2000US-0256719.
PR   06-DEC-2000; 2000US-0251479.
PR   08-DEC-2000; 2000US-0251856.
PR   08-DEC-2000; 2000US-0251868.
PR   08-DEC-2000; 2000US-0251869.
PR   08-DEC-2000; 2000US-0251989.
PR   08-DEC-2000; 2000US-0251990.
PR   11-DEC-2000; 2000US-0254097.
PR   05-JAN-2001; 2001US-0259678.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-502630/55.
XX
PT   Polynucleotides encoding digestive system antigens, useful for
PT   diagnosing, treating, preventing and/or prognozing disorders of the
PT   digestive system, particularly cancer and cancer metastases -
XX
PS   Disclosure; SEQ ID NO 3124; 986pp; English.
XX
CC   The present invention provides the protein and coding sequences of a
CC   number of human digestive system antigens. These can be used in the
CC   diagnosis, treatment and prevention of digestive system disorders,
CC   including cancer, Meckel's diverticulum, bacterial or parasitic
CC   infections, appendicitis, Hirschsprung's disease, chronic colitis or
CC   ulcerative colitis. The present sequence is a genomic DNA fragment
CC   encoding a digestive system antigen of the invention.
XX
SQ   Sequence 2266 BP; 486 A; 594 C; 578 G; 608 T; 0 other;

  Query Match             12.1%;  Score 121.2;  DB 22;  Length 2266;
  Best Local Similarity   83.1%;  Pred. No. 1.4e-23;
  Matches  138;  Conservative    0;  Mismatches   28;  Indels    0;  Gaps    0;

Qy       1 TGGCACGCGCCTGTAGTCCCAGCTACTCAGGAGACTGAGGCAGGAGAATCGCTTGAACCC 60
            | |  |||||||||| |||||| |||||||||| ||||||||||||||||||||||||
Db    1217 TAGTGCGCGCCTGTAATCCCAGTTACTCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCC 1158

Qy      61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACAGAC 120
           ||||| | |||||||||||||||||||| || |||||| |||||||||| | |||||
Db    1157 GGGAGGCAGAGGTTGCAGTGAGCCAAGATCACGCCACTGCGCTCCAGCCTGTCAACAGAG 1098

Qy     121 GTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAAT 166
             ||| | |||||| || |||  || || |||||| | | |||| |
Db    1097 ACTCCATCTCAAAAAAATAAATAAAAATAAATAAAGAAACTAAAGT 1052


RESULT 5
AAK83469/c
ID   AAK83469 standard; DNA; 16161 BP.
XX
AC   AAK83469;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:38281.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01354.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
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PR   14-AUG-2000; 2000US-0224518.
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PR   14-AUG-2000; 2000US-0225757.
PR   14-AUG-2000; 2000US-0225758.
PR   14-AUG-2000; 2000US-0225759.
PR   18-AUG-2000; 2000US-0226279.
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PR   01-SEP-2000; 2000US-0229287.
PR   01-SEP-2000; 2000US-0229343.
PR   01-SEP-2000; 2000US-0229344.
PR   01-SEP-2000; 2000US-0229345.
PR   05-SEP-2000; 2000US-0229509.
PR   05-SEP-2000; 2000US-0229513.
PR   06-SEP-2000; 2000US-0230437.
PR   06-SEP-2000; 2000US-0230438.
PR   08-SEP-2000; 2000US-0231242.
PR   08-SEP-2000; 2000US-0231243.
PR   08-SEP-2000; 2000US-0231244.
PR   08-SEP-2000; 2000US-0231413.
PR   08-SEP-2000; 2000US-0231414.
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PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and
PT metastasis -
XX
PS Disclosure; SEQ ID NO 38281; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting
CC the nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention.
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SQ Sequence 16161 BP; 3307 A; 4825 C; 4360 G; 3669 T; 0 other;

Query Match 11.9%; Score 119; DB 22; Length 16161;
Best Local Similarity 82.0%; Pred. No. 1.6e-22;
Matches 137; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

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Db   1678 TGGCACGTGCCTGTAATCCCAGCTAGTCAAGAGGCTGAGGCAGGAGAATCACTTGAACCA 1619

Qy     61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACAGAC 120
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Db   1618 GGGAGGCGGAGGTTGCAGTGAGCCAAGATCGCGCCACTGCACTCCAGCCTGGCAACAGAG 1559

Qy    121 GTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAATC 167
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Db   1558 CAAGACTGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATTTC 1512
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ID AAK82137 standard; DNA; 1031 BP.
XX
AC AAK82137;
XX
DT 07-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:36949.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US01354.
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XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and
PT metastasis -
XX

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PS   Disclosure; SEQ ID NO 36949; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting
CC   the nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention.
XX
SQ   Sequence 1031 BP; 288 A; 180 C; 211 G; 352 T; 0 other;

  Query Match             11.8%;  Score 118.4;  DB 22;  Length 1031;
  Best Local Similarity   76.0%;  Pred. No. 5.9e-23;
  Matches  146;  Conservative    0;  Mismatches   46;  Indels    0;  Gaps    0;

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Qy      61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACAGAC 120
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Db     294 CGGAGGCGGAGATTGCAGTGAGCCAAGATCACGCCACTGCACTCCAGTCTGGCGACAGAG 235

Qy     121 GTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAATCCGGCGCTGCGCGG 180
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Qy     181 TGACATCAGTCT 192
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Db     174 CAAACACAGGCT 163


RESULT 7
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ID   AAS32727 standard; DNA; 17792 BP.
XX
AC   AAS32727;
XX
DT   17-DEC-2001  (first entry)
XX
DE   Human genomic DNA for novel endocrine antigen, SEQ ID No 681.
XX
KW   Human; endocrine antigen; ds; cytostatic; antiinfertility; antidiabetic;
KW   thyroid-active; adrenal-active; androgenic; gastric; gene therapy;
KW   antisense-therapy; antibody; endocrine disorder; hormone imbalance;
KW   reproductive disorder; endocrine cancer; pancreatic disorder;
KW   diabetes mellitus; adrenal gland disorder; hirsutism; thyroid disorder;
KW   hyperthyroidism; hypothalamic disorder; vanishing testes syndrome.
XX
OS   Homo sapiens.
XX
PN   WO200155319-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01335.
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PR   08-DEC-2000; 2000US-0251856.
PR   08-DEC-2000; 2000US-0251868.
PR   08-DEC-2000; 2000US-0251869.
PR   08-DEC-2000; 2000US-0251989.
PR   08-DEC-2000; 2000US-0251990.
PR   11-DEC-2000; 2000US-0254097.
PR   05-JAN-2001; 2001US-0259678.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-457726/49.
XX
PT   Isolated polypeptide for treating, preventing and prognosing disorders
PT   related to the endocrine system including endocrine disorders,
PT   reproductive disorders, and gastrointestinal disorders and also for
PT   testing and detection e.g. diagnosis -
XX
PS   Disclosure; SEQ ID No 681; 558pp; English.
XX
CC   The invention relates to cDNAs encoding novel human endocrine
CC   antigens or a fragment having biological activity, a domain, an epitope,
CC   full length protein, variant, allelic variant or a species homologue of
CC   the cDNA/antigen. The DNAs and polypeptides are useful for preventing,
CC   treating or ameliorating a medical condition when administered
CC   (e.g. by gene therapy or antisense-therapy). Identifying mutations in
CC   the genes coding for the antigens is useful for diagnosing a pathological
CC   condition or a susceptibility to a pathological condition. The DNAs,
CC   antigens and antibodies raised against the antigens useful for treating,
CC   preventing and/ or prognosing disorders related to the endocrine system
CC   or hormone imbalance or reproductive disorders, cancers of endocrine
CC   tissues, disorders of the pancreas (e.g. diabetes mellitus), the adrenal
CC   glands (e.g. hirsutism), ovaries, the thyroid (e.g. hyperthyroidism), the
CC   hypothalamus and testes (e.g. vanishing testes syndrome), many examples
CC   of diseases and disorders are given in the specification. The present
CC   sequence is genomic DNA fragment form a gene encoding an endocrine
CC   antigen of the invention.
CC   Note: The sequence data for this patent did not form part
CC   of the printed specification, but was obtained in electronic
CC   format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 17792 BP; 4372 A; 4626 C; 4413 G; 4381 T; 0 other;

  Query Match             11.7%;  Score 117.4;  DB 22;  Length 17792;
  Best Local Similarity   81.1%;  Pred. No. 4.6e-22;
  Matches  150;  Conservative    0;  Mismatches   31;  Indels    4;  Gaps    1;

Qy       1 TGGCACGCGCCTGTAGTCCCAGCTACTCAGGAGACTGAGGCAGGAGAATCGCTTGAACCC 60
           ||||| || |||||||||||||||||||||||| |||||||||||||||||||||||||
Db    8122 TGGCAGGCACCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCT 8063

Qy      61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACA--- 117
           ||||| ||||||||||||||||  |||| ||  |||||||||||||||||||| |||
Db    8062 GGGAGGCGGAGGTTGCAGTGAGCTGAGATTGCACCACTGCACTCCAGCCTGGCAACAAAG 8003

Qy     118 -GACGTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAATCCGGCGCTGC 176
            ||   ||||| |||||| ||||||| |||| |||||| || |  ||||    ||  ||
Db    8002 CGAGACTCCGTCTCAAAAAAAAAAAAAAAATAATAATAATAATACAAAAAATTAGCCGGGC 7943

Qy     177 GCGGT 181
             |||
Db    7942 ATGGT 7938


RESULT 8
AAS36099/c
ID   AAS36099 standard; DNA; 17792 BP.
XX
AC   AAS36099;
XX
DT   17-DEC-2001  (first entry)
XX
DE   Human cardiovascular system antigen genomic DNA SEQ ID No 1599.
XX
KW   Cardiovascular system antigen; human; mouse; rabbit; goat; horse; cat;
KW   chicken; sheep; immunosuppressive; antiarthritic; vasotropic; dog;
KW   antirheumatic; antiproliferative; cytostatic; cardiant; neuroprotective;
KW   cerebroprotective; nootropic; antibacterial; virucide; fungicide; cancer;
KW   ophthalmological; vulnerary; gene therapy; autoimmune disease; neoplasm;
KW   hyperproliferative disorder; breast; liver; cardiovascular disorder; ds;
KW   cerebrovascular disorder; nervous system disorder; bacterial infection;
KW   fungal infection; viral infection; ocular disorder; endocrine disorder;
KW   gastrointestinal disorder; renal disorder; respiratory disorder;
KW   wound healing; skin aging; organ transplantation; tissue regeneration;
KW   anti-infertility.
XX
OS   Homo sapiens.
XX
PN   WO200155321-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01340.
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XX
PR 31-JAN-2000; 2000US-0179065.
PR 04-FEB-2000; 2000US-0180628.
PR 24-FEB-2000; 2000US-0184664.
PR 02-MAR-2000; 2000US-0186350.
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PR 18-APR-2000; 2000US-0198123.
PR 19-MAY-2000; 2000US-0205515.
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PR 30-JUN-2000; 2000US-0215135.
PR 07-JUL-2000; 2000US-0216647.
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PR 29-SEP-2000; 2000US-0236369.
PR 29-SEP-2000; 2000US-0236370.
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PR 02-OCT-2000; 2000US-0237039.
PR 02-OCT-2000; 2000US-0237040.
PR 13-OCT-2000; 2000US-0239935.
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PR 17-NOV-2000; 2000US-0249300.
PR 01-DEC-2000; 2000US-0250160.
PR 01-DEC-2000; 2000US-0250391.
PR 05-DEC-2000; 2000US-0251030.
PR 05-DEC-2000; 2000US-0251988.
PR 05-DEC-2000; 2000US-0256719.
PR 06-DEC-2000; 2000US-0251479.
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PR 08-DEC-2000; 2000US-0251869.
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PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-451930/48.
XX
PT New cardiovascular system related polynucleotides and polypeptides,
PT useful for diagnosing, treating and/or preventing disorders of the

```
PT   cardiovascular system -
XX
PS   Claim 1; SEQ ID No 1599; 674pp; English.
XX
CC   Sequences AAS35741-AAS36942 represent genomic DNA molecules, which encode
CC   the cardiovascular system antigen polypeptides of the invention.
CC   Cardiovascular system antigens and their associated polynucleotides are
CC   useful in the diagnosis, treatment and prevention of various types of
CC   disorders in e.g. humans, mice, rabbits, goats, horses, cats, dogs,
CC   chickens or sheep. A pathological condition can be determined by
CC   detecting the presence or absence of a mutation in a cardiovascular
CC   system antigen polynucleotide. The treatable disorders include autoimmune
CC   diseases such as rheumatoid arthritis, hyperproliferative disorders such
CC   as neoplasms of the breast or liver, cardiovascular disorders such as
CC   cardiac arrest, cerebrovascular disorders such as cerebral ischaemia,
CC   nervous system disorders such as Alzheimer's disease, infections caused
CC   by bacteria, viruses and fungi, ocular disorders such as corneal
CC   infection, endocrine disorders such as premature labour and infertility,
CC   gastrointestinal disorders such as Crohn's disease, renal disorders such
CC   as glomerulonephritis and respiratory disorders such as asthma and
CC   pleurisy. The polypeptides can also be used to aid wound healing, to
CC   prevent skin aging due to sunburn, to maintain organs before
CC   transplantation, to regenerate tissues and in chemotaxis.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX

  Query Match             11.7%;  Score 117.4;  DB 22;  Length 17792;
  Best Local Similarity   81.1%;  Pred. No. 4.6e-22;
  Matches  150;  Conservative    0;  Mismatches   31;  Indels    4;  Gaps    1;

Qy      1 TGGCACGCGCCTGTAGTCCCAGCTACTCAGGAGACTGAGGCAGGAGAATCGCTTGAACCC 60
          ||||| || ||||||||||||||||||||||||| ||||||||||||||||||||||||
Db   8122 TGGCAGGCACCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCT 8063

Qy     61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACA--- 117
          ||||| ||||||||||||||||  |||| ||  |||||||||||||||||| |||
Db   8062 GGGAGGCGGAGGTTGCAGTGAGCTGAGATTGCACCACTGCACTCCAGCCTGGCAACAAAG 8003

Qy    118 -GACGTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAATCCGGCGCTGC 176
           ||   ||||| |||||| ||||||| |||| |||||| || |  ||||    ||   ||
Db   8002 CGAGACTCCGTCTCAAAAAAAAAAAAAAAATAATAATAATACAAAAAATTAGCCGGGC 7943

Qy    177 GCGGT 181
            |||
Db   7942 ATGGT 7938


RESULT 9
AAX83003
ID   AAX83003 standard; DNA; 87350 BP.
XX
AC   AAX83003;
XX
DT   31-AUG-1999  (first entry)
XX
DE   Human WRN genomic sequence.
XX
KW   Human; WRN; Werner's syndrome; detection; diagnosis; autosomal;
KW   recessive disorder; phenotype; ss.
XX
OS   Homo sapiens.
XX
PN   WO9724435-A1.
XX
PD   10-JUL-1997.
XX
PF   30-DEC-1996;   96WO-US20785.
XX
PR   12-APR-1996;   96US-0632175.
PR   29-DEC-1995;   95US-0009409.
PR   29-DEC-1995;   95US-0580539.
PR   30-JAN-1996;   96US-0010835.
PR   30-JAN-1996;   96US-0594242.
XX
PA   (DARW-) DARWIN MOLECULAR CORP.
PA   (OSHI/) OSHIMA J.
XX
PI   Fu Y,  Mulligan J,  Oshima J,  Schellenberg GD,  Yu C;
XX
DR   WPI; 1997-363671/33.
XX
PT   Isolated nucleic acid molecule encoding the WRN gene product  -
PT   useful for detection and treatment of Werner's syndrome, and related
PT   diseases
XX
PS   Claim 1; Fig 5A-U; 153pp; English.
XX
CC   This sequence represents the genomic region containing the coding
CC   sequence for the human WRN gene which encodes a protein related to
CC   Werner's syndrome.  The products can be used for the detection and
CC   treatment of Werner's syndrome (WS), an autosomal recessive disorder
CC   with a complex phenotype, as well as related diseases.
XX
SQ   Sequence 87350 BP; 25621 A; 16221 C; 17012 G; 28450 T; 46 other;

  Query Match             11.7%;  Score 117;  DB 18;  Length 87350;
  Best Local Similarity   81.8%;  Pred. No. 1.3e-21;
  Matches  135;  Conservative    0;  Mismatches   30;  Indels    0;  Gaps    0;

Qy      1 TGGCACGCGCCTGTAGTCCCAGCTACTCAGGAGACTGAGGCAGGAGAATCGCTTGAACCC 60
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Db  10250 TGGCACGCGCCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCT 10309

Qy     61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACAGAC 120
          ||||| |||||||||| ||||||| |||| | | ||||||||||||||||||||||||||
Db  10310 GGGAGGCGGAGGTTGCCGTGAGCCGAGATTGGGCCACTGCACTCCAGCCTGGCGACAGAG 10369

Qy    121 GTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAA 165
            |  | |       |||||||| || |  || ||||| || ||||
Db  10370 CGACACTCTTGTCTCAAAAAAAAAACAAAAAAAAAAACAAAAAAA 10414


RESULT 10
AAK62290/c
ID   AAK62290 standard; cDNA; 1039 BP.
XX
AC   AAK62290;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen encoding cDNA SEQ ID NO:7350.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01354.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
PR   19-MAY-2000; 2000US-0205515.
PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
PR   30-JUN-2000; 2000US-0215135.
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PR 07-JUL-2000; 2000US-0216647.
PR 07-JUL-2000; 2000US-0216880.
PR 11-JUL-2000; 2000US-0217487.
PR 11-JUL-2000; 2000US-0217496.
PR 14-JUL-2000; 2000US-0218290.
PR 26-JUL-2000; 2000US-0220963.
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PR 14-AUG-2000; 2000US-0224518.
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PR 22-AUG-2000; 2000US-0226681.
PR 22-AUG-2000; 2000US-0226868.
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PR 17-NOV-2000; 2000US-0249299.
PR 17-NOV-2000; 2000US-0249300.
PR 01-DEC-2000; 2000US-0250160.
PR 01-DEC-2000; 2000US-0250391.
PR 05-DEC-2000; 2000US-0251030.
PR 05-DEC-2000; 2000US-0251988.
PR 05-DEC-2000; 2000US-0256719.
PR 06-DEC-2000; 2000US-0251479.
PR 08-DEC-2000; 2000US-0251856.
PR 08-DEC-2000; 2000US-0251868.
PR 08-DEC-2000; 2000US-0251869.
PR 08-DEC-2000; 2000US-0251989.
PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
DR P-PSDB; AAM89509.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and
PT metastasis -
XX
PS Claim 1; SEQ ID NO 7350; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome

```
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting
CC   the nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention.
XX
SQ   Sequence 1039 BP; 291 A; 182 C; 214 G; 351 T; 1 other;

  Query Match             11.7%;  Score 116.8;  DB 22;  Length 1039;
  Best Local Similarity   75.5%;  Pred. No. 1.7e-22;
  Matches  145;  Conservative    0;  Mismatches   47;  Indels    0;  Gaps    0;

Qy       1 TGGCACGCGCCTGTAGTCCCAGCTACTCAGGAGACTGAGGCAGGAGAATCGCTTGAACCC 60
           |||||| |||||||||||| |||||||||| |||||||||||||| ||||||||||
Db     362 TGGCACATGCCTGTAGTCCCACCTACTCAGGAGGCTGAGGCAGGAGAATTGCTTGAACCC 303

Qy      61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACAGAC 120
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Db     302 CGGAGGCGGAGATTGCAGTGAGCCAAGATCACGCCACTGCACTCCAGTCTGGCGACAGAG 243

Qy     121 GTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAATCCGGCGCTGCGCGG 180
                 | ||   | ||||||| || |||  ||||| | |||     || || | |
Db     242 CAAGACTGTCTCCAAAAAAAAAAAAAAATTCGTAAAAGTATTAAGTCATGGTGCAGAGATA 183

Qy     181 TGACATCAGTCT 192
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Db     182 CAAACACAGGCT 171


RESULT 11
AAK83468/c
ID   AAK83468 standard; DNA; 16106 BP.
XX
AC   AAK83468;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:38280.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01354.
XX
PR   31-JAN-2000; 2000US-0179065.
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PR   29-SEP-2000; 2000US-0236370.
PR   02-OCT-2000; 2000US-0236802.
PR   02-OCT-2000; 2000US-0237037.
PR   02-OCT-2000; 2000US-0237038.
PR   02-OCT-2000; 2000US-0237039.
PR   02-OCT-2000; 2000US-0237040.
PR   13-OCT-2000; 2000US-0239935.
PR   13-OCT-2000; 2000US-0239937.
PR   20-OCT-2000; 2000US-0240960.
PR   20-OCT-2000; 2000US-0241221.
PR   20-OCT-2000; 2000US-0241785.
PR   20-OCT-2000; 2000US-0241786.
PR   20-OCT-2000; 2000US-0241787.
PR   20-OCT-2000; 2000US-0241808.
PR   20-OCT-2000; 2000US-0241809.
PR   20-OCT-2000; 2000US-0241826.
PR   01-NOV-2000; 2000US-0244617.
PR   08-NOV-2000; 2000US-0246474.
PR   08-NOV-2000; 2000US-0246475.
PR   08-NOV-2000; 2000US-0246476.
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PR   08-NOV-2000; 2000US-0246477.
PR   08-NOV-2000; 2000US-0246478.
PR   08-NOV-2000; 2000US-0246523.
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PR   08-NOV-2000; 2000US-0246609.
PR   08-NOV-2000; 2000US-0246610.
PR   08-NOV-2000; 2000US-0246611.
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PR   08-DEC-2000; 2000US-0251869.
PR   08-DEC-2000; 2000US-0251989.
PR   08-DEC-2000; 2000US-0251990.
PR   11-DEC-2000; 2000US-0254097.
PR   05-JAN-2001; 2001US-0259678.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and
PT   metastasis -
XX
PS   Disclosure; SEQ ID NO 38280; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting
CC   the nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention.
XX
SQ   Sequence 16106 BP; 3275 A; 4801 C; 4361 G; 3669 T; 0 other;

  Query Match             11.7%;  Score 116.8;  DB 22;  Length 16106;
  Best Local Similarity   83.1%;  Pred. No. 6.4e-22;
  Matches  133;  Conservative    0;  Mismatches   27;  Indels    0;  Gaps    0;

Qy       1 TGGCACGCGCCTGTAGTCCCAGCTACTCAGGAGACTGAGGCAGGAGAATCGCTTGAACCC 60
           ||||||| ||||||| ||||||||| ||| ||| ||||||||||||||| ||||||||
Db    1676 TGGCACGTGCCTGTAATCCCAGCTAGTCAAGAGGCTGAGGCAGGAGAATCACTTGAACCA 1617

Qy      61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACAGAC 120
           ||||| ||||||||||||||||||||||||| |||||||||||||||||| |||||
Db    1616 GGGAGGCGGAGGTTGCAGTGAGCCAAGATCGCGCCACTGCACTCCAGCCTGGCAACAGAG 1557

Qy     121 GTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAA 160
                 | ||  || ||||||| || |  || ||||| ||
Db    1556 CAAGACTGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1517


RESULT 12
AAK64559/c
ID   AAK64559 standard; cDNA; 666 BP.
XX
AC   AAK64559;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen encoding cDNA SEQ ID NO:9619.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01354.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
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PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
PR   19-MAY-2000; 2000US-0205515.
PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
PR   30-JUN-2000; 2000US-0215135.
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PR   11-JUL-2000; 2000US-0217496.
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PR 01-NOV-2000; 2000US-0244617.
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PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
DR P-PSDB; AAM91778.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and
PT metastasis -
XX
PS Claim 1; SEQ ID NO 9619; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting
CC the nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention.
XX
SQ Sequence 666 BP; 139 A; 177 C; 146 G; 199 T; 5 other;

Query Match 11.5%; Score 115.4; DB 22; Length 666;
Best Local Similarity 84.0%; Pred. No. 3.3e-22;
Matches 142; Conservative 0; Mismatches 23; Indels 4; Gaps 1;

Qy 1 TGGCACGCGCCTGTAGTCCCAGCTACTCAGGAGACTGAGGCAGGAGAATCGCTTGAACCC 60
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Db    179 TGGCACACGCCTGTAGTCCCAGCTACTCGGGAGGNTGAGGCAGGAGAATCGCTTGAACTC 120

Qy     61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACAG-- 118
          | |||  ||||||||||||||||||| ||| ||| ||||||| ||||||||||||||||
Db    119 GAGAGGTGGAGGTTGCAGTGAGCCAGGATTGCGCCACTGCANTCCAGCCTGGCGACAGAG 60

Qy    119 --ACGTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAA 165
            |   || |||||||| |||||| || |  || |||||||| ||||
Db     59 CCAGACTCAGTTTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAGAAAAAA 11


RESULT 13
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ID   AAC59766 standard; cDNA; 929 BP.
XX
AC   AAC59766;
XX
DT   26-JAN-2001  (first entry)
XX
DE   Human secreted protein gene 29 SEQ ID NO:39.
XX
KW   Human; secreted protein; diagnosis; immunosuppressive; antiarthritic;
KW   antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic;
KW   cerebroprotective; nootropic; neuroprotective; antibacterial; virucide;
KW   fungicide; ophthalmological; gene therapy; autoimmune disease; neoplasm;
KW   hyperproliferative disorder; cancer; cardiovascular disorder; infection;
KW   cerebrovascular disorder; angiogenesis; nervous system disorder;
KW   ocular disorder; wound healing; skin aging; food additive; preservative;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO200056751-A1.
XX
PD   28-SEP-2000.
XX
PF   09-MAR-2000; 2000WO-US06013.
XX
PR   19-MAR-1999;   99US-0125360.
PR   11-JUN-1999;   99US-0138626.
PR   03-DEC-1999;   99US-0168662.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM,  Komatsoulis G;
XX
DR   WPI; 2000-579482/54.
DR   P-PSDB; AAB34605.
XX
PT   Isolated nucleic acid molecule encoding a human secreted protein is
PT   used in preventing, treating or ameliorating a medical condition  -
XX
PS   Claim 1; Page 358; 419pp; English.
XX
CC   The polynucleotide sequences given in AAC59738 to AAC59787 encode the
CC   human secreted proteins given in AAB34577 to AAB34626. AAB34627 to
CC   AAB34686 represent human secreted polypeptide sequences and proteins
CC   homologous to them, which are given in the exemplification of the present
CC   invention. Human  secreted proteins have activities based on the tissues
CC   and cells the  genes are expressed in. Example of activities include:
CC   antiarthritic; immunosuppressive; antirheumatic; antiproliferative;
CC   cytostatic;  cardiant; vasotropic; cerebroprotective; nootropic;
CC   neuroprotective;  antibacterial; virucide; fungicide; and
CC   ophthalmological. The  polynucleotides and proteins can be are used to
CC   prevent, treat or  ameliorate a medical condition in e.g. humans, mice,
CC   rabbits, goats,  horses, cats, dogs, chickens or sheep. They are also
CC   used in diagnosing  a pathological condition or susceptibility to a
CC   pathological condition.  Disorders which are diagnosed or treated include
CC   autoimmune diseases,  hyperproliferative disorders e.g. neoplasms and
CC   cancers of the breast  or liver, cardiovascular disorders,
CC   cerebrovascular disorders,  angiogenesis, nervous system disorders,
CC   infections caused by bacteria,  viruses and fungi and ocular disorders.
CC   The proteins can also be used  to aid wound healing and epithelial cell
CC   proliferation, to prevent skin  aging due to sunburn, to maintain organs
CC   before transplantation, for  supporting cell culture of primary tissues,
CC   to regenerate tissues and  in chemotaxis. The proteins can also be used
CC   as a food additive or  preservative to increase or decrease storage
CC   capabilities. AAC59729 to  AAC59737 and AAB34576 represent sequences used
CC   in the exemplification of  the present invention.
XX
SQ   Sequence 929 BP; 313 A; 174 C; 201 G; 241 T; 0 other;

  Query Match             11.4%;  Score 114.6;  DB 21;  Length 929;
  Best Local Similarity   81.2%;  Pred. No. 6.6e-22;
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Qy       1 TGGCACGCGCCTGTAGTCCCAGCTACTCAGGAGACTGAGGCAGGAGAATCGCTTGAACCC 60
           ||||| |||||||||||||||||||||||||| ||||||||||||||||||||||||||
Db     746 TGGCATGCGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCC 805

Qy      61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGG-----CGA 115
           ||||| |||||||||||||||| |||| ||  ||||||||||||||||||      ||
Db     806 GGGAGGCGGAGGTTGCAGTGAGCCGAGATTGCACCACTGCACTCCAGCCTGGGTGACAGA 865

Qy     116 CAGACGTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAATCCGGCGCTG 175
             |   ||||| |||||| ||||||| || |  || ||||| || ||||    | || |
Db     866 GCAAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGGGCGG 925

Qy     176 C 176
           |
Db     926 C 926


RESULT 14
ABA21235
ID   ABA21235 standard; DNA; 2361 BP.
XX
AC   ABA21235;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Human nervous system related polynucleotide SEQ ID NO 13566.
XX
KW   Human; nootropic; neuroprotective; cytostatic; dermatological; virucide;
KW   immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary;
KW   antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer;
KW   antirheumatic; hepatotropic; cerebroprotective; antiinflammatory;
KW   antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal;
KW   antiparasitic; cardiant; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; nephrotropic; gene therapy; vaccine; ds.
XX
OS   Homo sapiens.
XX
PN   WO200159063-A2.
XX
PD   16-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01334.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
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PR 20-OCT-2000; 2000US-0242221.
PR 01-NOV-2000; 2000US-0244617.
PR 08-NOV-2000; 2000US-0246474.
PR 08-NOV-2000; 2000US-0246475.
PR 08-NOV-2000; 2000US-0246476.
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PR 01-DEC-2000; 2000US-0250391.
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PR 06-DEC-2000; 2000US-0251479.
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PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-541565/60.
XX
PT Nucleic acids encoding 3224 human nervous system antigen polypeptides,
PT useful for preventing, diagnosing and/or treating nervous system
PT cancers and metastases -
XX
PS Disclosure; SEQ ID NO 13566; 1701pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (ABA11004-ABA21534) and proteins
CC (ABB14678-ABB18001) useful for preventing, treating or ameliorating
CC medical conditions e.g. by protein or gene therapy. The genes are
CC isolated from a range of human tissues disclosed in the specification.
CC The nucleic acids, proteins, antibodies and (ant)agonists are useful
CC in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC and ovarian cancer and other cancers of the adrenal gland, bone, bone
CC marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC colitis; (c) cardiovascular disorders such as myocardial ischaemias;
CC (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC epilepsy; and (f) infectious diseases such as viral, bacterial, fungal

```
CC   and parasitic infections.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 2361 BP; 635 A; 593 C; 661 G; 472 T; 0 other;

  Query Match             11.4%;  Score 114.2;  DB 22;  Length 2361;
  Best Local Similarity   80.2%;  Pred. No. 1.3e-21;
  Matches  134;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy      4 CACGCGCCTGTAGTCCCAGCTACTCAGGAGACTGAGGCAGGAGAATCGCTTGAACCCGGG 63
          ||||||||||||||||||||||||||||| |||||||||| ||| ||||||||||||
Db   1531 CACGCGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAAAATTGCTTGAACCCGGG 1590

Qy     64 AGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACAGACGTT 123
          || | ||||||||||||||||||||| | |||||||||||||||| ||||||
Db   1591 AGGCAGAGGTTGCAGTGAGCCAAGATCGGGCCACTGCACTCCAGCCTGGTGACAGAGCGA 1650

Qy    124 CCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAATCCGG 170
            | |      ||||||| || |  || ||||| || |  | | ||
Db   1651 GACTATGTCGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAATTAGCTGG 1697


RESULT 15
AAK66931/c
ID   AAK66931 standard; DNA; 30620 BP.
XX
AC   AAK66931;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:21743.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01354.
XX
PR   31-JAN-2000; 2000US-0179065.
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PR   05-JAN-2001; 2001US-0259678.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and
PT   metastasis -
XX
PS   Disclosure; SEQ ID NO 21743; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting
CC   the nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention.
XX
SQ   Sequence 30620 BP; 7407 A; 7216 C; 7192 G; 8805 T; 0 other;

  Query Match             11.4%;  Score 114;  DB 22;  Length 30620;
  Best Local Similarity   74.2%;  Pred. No. 5.4e-21;
  Matches  144;  Conservative    0;  Mismatches   50;  Indels    0;  Gaps    0;

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Qy      61 GGGAGACGGAGGTTGCAGTGAGCCAAGATCGCGTCACTGCACTCCAGCCTGGCGACAGAC 120
           ||||| | |||||||| |||||| |||||  ||||  |||||||||||||| |    |
Db   18264 GGGAGGCAGAGGTTGCGGTGAGCCTAGATCATGTCATCGCACTCCAGCCTGGGGGACAAG 18205

Qy     121 GTTCCGTTTCAAAAGAAAAAAATAATATTAATAAAAAGAATAAAATCCGGCGCTGCGCGG 180
             |  |  |  |    |||||| || |  || ||||| || |||| |||||   | ||||
Db   18204 TGTGAGACTTCATCTCAAAAAAAAAAAAGAAAAAAAAAAAAAAAAAGCCGGCCGGGTGCGG 18145

Qy     181 TGACATCAGTCTCT 194
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Db   18144 TGGCTCACGCTTCT 18131
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GenCore version 5.1.3

OM nucleic - nucleic search, using sw model

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
c	1	85.2	8.5	403	24	ABS05240	Human genome-deriv
c	2	71	7.1	14637	22	AAS32620	Human genomic DNA
	3	58.6	5.9	267156	24	ABL68560	Kidney cancer rela
	4	55.2	5.5	983	24	ABK27453	Colon cancer assoc
	5	55.2	5.5	1028	24	ABK27467	DNA encoding colon
	6	54.8	5.5	1182	23	AAS68813	DNA encoding novel
	7	54.8	5.5	1182	23	AAS78330	DNA encoding novel
	8	54.8	5.5	1185	23	AAS67319	DNA encoding novel
	9	53	5.3	1503	23	AAS78107	DNA encoding novel
	10	52	5.2	893	23	AAS65934	DNA encoding novel
	11	50.2	5.0	11197	24	ABK12708	Human T1/ST2 recep
c	12	50	5.0	165199	24	ABK83460	Human cDNA differe
	13	48.8	4.9	149480	24	ABL61947	Colon adenocarcino
	14	48.8	4.9	149480	24	ABL61948	Colon adenocarcino
	15	48.8	4.9	149480	24	ABL68365	Kidney cancer rela
	16	48.4	4.8	6068	24	AAD22800	Human EMR2 larger
c	17	45.2	4.5	867	22	ABA13424	Human nervous syst
	18	44	4.4	17721	24	ABL33728	Human immune syste
c	19	43.8	4.4	510	22	AAL16437	Human breast cance
c	20	43.8	4.4	696	22	AAL25280	Human breast cance
c	21	43.6	4.4	615	22	ABA19493	Human nervous syst
c	22	43.6	4.4	864	22	ABA19492	Human nervous syst
c	23	43.6	4.4	864	22	ABA19494	Human nervous syst
c	24	42.2	4.2	6744	20	AAZ38125	Human FATP genomic
	25	42.2	4.2	143068	21	AAF21105	Human low adenosin
	26	42.2	4.2	143068	21	AAF21272	Human low adenosin
	27	42.2	4.2	143068	21	AAA34983	Human adenosine re
	28	42.2	4.2	143068	21	AAA35150	Human adenosine re
	29	42.2	4.2	143068	24	ABL68124	Ovary cancer relat
	30	42.2	4.2	149412	21	AAA35151	Human adenosine re
	31	42.2	4.2	152740	21	AAF21273	Human low adenosin
	32	41.4	4.1	1026	23	AAS78332	DNA encoding novel
c	33	41	4.1	1258	22	ABA21433	Human nervous syst
c	34	40.6	4.1	143068	21	AAF21105	Human low adenosin
c	35	40.6	4.1	143068	21	AAF21272	Human low adenosin
c	36	40.6	4.1	143068	21	AAA34983	Human adenosine re
c	37	40.6	4.1	143068	21	AAA35150	Human adenosine re
c	38	40.6	4.1	143068	24	ABL68124	Ovary cancer relat
c	39	40.6	4.1	149412	21	AAA35151	Human adenosine re
c	40	40.6	4.1	152740	21	AAF21273	Human low adenosin
c	41	39.6	4.0	521	22	ABA07519	Human ovarian and
c	42	39.6	4.0	521	22	AAL00444	Human reproductive
c	43	39.6	4.0	639	22	AAL25139	Human breast cance
c	44	39.2	3.9	674	22	AAL16296	Human breast cance
c	45	39	3.9	260	21	AAC03696	Human secreted pro

ALIGNMENTS

RESULT 1
ABS05240/c
ID ABS05240 standard; DNA; 403 BP.
XX
AC ABS05240;
XX
DT 19-AUG-2002 (first entry)
XX
DE Human genome-derived single exon probe from lung SEQ ID No 5231.
XX
KW Human; ds; single exon probe; asthma; lung cancer; COPD; ILD;
KW chronic obstructive pulmonary disease; interstitial lung disease;
KW familial idiopathic pulmonary fibrosis; neurofibromatosis;
KW tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
KW Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis;
KW pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome;
KW pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
KW primary ciliary dyskinesis; pulmonary hypertension;
KW hyaline membrane disease.
XX
OS Homo sapiens.
XX
PN WO200186003-A2.
XX
PD 15-NOV-2001.
XX
PF 30-JAN-2001; 2001WO-US00665.
XX
PR 04-FEB-2000; 2000US-180312P.
PR 26-MAY-2000; 2000US-207456P.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.

PR 21-SEP-2000; 2000US-234687P.
PR 27-SEP-2000; 2000US-236359P.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2002-114183/15.
XX
PT Spatially-addressable set of single exon nucleic acid probes, used to
PT measure gene expression in human lung samples -
XX
PS Claim 1; SEQ ID No 5231; 634pp; English.
XX
CC The invention relates to a spatially-addressable set of single exon
CC nucleic acid probes for measuring gene expression in a sample derived
CC from human lung comprising single exon nucleic acid probes having one of
CC 12614 nucleic acid sequences mentioned in the specification, or their
CC complements or the 12387 open reading frames derived from the 12614
CC probes. Also included are a microarray comprising the novel set of
CC probes; the novel set of probes which hybridise at high stringency to a
CC nucleic acid expressed in the human lung; measuring gene expression in a
CC sample derived from human lung, comprising (a) contacting the array with
CC a collection of detectably labeled nucleic acids derived from human lung
CC mRNA, and (b) measuring the label detectably bound to each probe of
CC the array; identifying exons in a eukaryotic genome, comprising
CC (a) algorithmically predicting at least one exon from genomic sequences
CC of the eukaryote; and (b) detecting specific hybridisation of detectably
CC labeled nucleic acids from eukaryote lung mRNA, to a single exon probe,
CC having a fragment identical to the predicted exon, the probe is included
CC in the above mentioned microarray; assigning exons to a single gene,
CC comprising (a) identifying exons from genomic sequence by the method
CC above and (b) measuring the expression of each of the exons in several
CC tissues and/or cell types using hybridisation to a single exon
CC microarrays having a probe with the exon, where a common pattern of
CC expression of the exons in the tissues and/or cell types indicates that
CC the exons should be assigned to a single gene; a peptide comprising one
CC of 12011 sequences, mentioned in the specification, or encoded by the
CC probes/open reading frames (ORF). The probes are used for gene
CC expression analysis, and for identifying exons in a gene, particularly
CC using human lung derived mRNA and for the study of lung diseases
CC such as asthma, lung cancer, chronic obstructive pulmonary disease
CC (COPD), interstitial lung disease (ILD), familial idiopathic pulmonary
CC fibrosis, neurofibromatosis, tuberous sclerosis, Gaucher's disease,
CC Niemann-Pick disease, Hermansky-Pudlak syndrome, sarcoidosis, pulmonary
CC haemosiderosis, pulmonary histiocytosis, lymphangioleiomyomtosis,
CC pulmonary alveolar proteinosis, Karagener syndrome, fibrocystic
CC pulmonary dysplasia, primary ciliary dyskinesis, pulmonary hypertension
CC and hyaline membrane disease. The present sequence is a single exon
CC probe of the invention.
CC Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic
CC format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 403 BP; 80 A; 122 C; 108 G; 93 T; 0 other;

Query Match 8.5%; Score 85.2; DB 24; Length 403;
Best Local Similarity 61.1%; Pred. No. 1.2e-16;
Matches 138; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

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Qy    831 AGAGGAGGAATTTGGGGTTTGGTCCCAGTCCATGAAGTGGCACAGTCAGAATAAAAGGTG 890
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Qy    891 AGAGCTTAGGAGATTAGCGGAGGGTAGAAGAACACTCTGTCTTGTGACCAGCTTCAGAGA 950
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Db    269 AGGCCAGGGCAGGAATTGGGATAGTAGGATTGAACTCTCCCTGGGGGCCAGCCTCAGAAA 210

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RESULT 2
AAS32620/c
ID AAS32620 standard; DNA; 14637 BP.
XX
AC AAS32620;
XX
DT 17-DEC-2001 (first entry)
XX
DE Human genomic DNA for novel endocrine antigen, SEQ ID No 574.
XX
KW Human; endocrine antigen; ds; cytostatic; antiinfertility; antidiabetic;
KW thyroid-active; adrenal-active; androgenic; gastric; gene therapy;
KW antisense-therapy; antibody; endocrine disorder; hormone imbalance;
KW reproductive disorder; endocrine cancer; pancreatic disorder;
KW diabetes mellitus; adrenal gland disorder; hirsutism; thyroid disorder;
KW hyperthyroidism; hypothalamic disorder; vanishing testes syndrome.
XX
OS Homo sapiens.
XX
PN WO200155319-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US01335.
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PR 31-JAN-2000; 2000US-0179065.
PR 04-FEB-2000; 2000US-0180628.
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PR 02-MAR-2000; 2000US-0186350.
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PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-457726/49.
XX
PT Isolated polypeptide for treating, preventing and prognosing disorders
PT related to the endocrine system including endocrine disorders,
PT reproductive disorders, and gastrointestinal disorders and also for
PT testing and detection e.g. diagnosis -
XX
PS Disclosure; SEQ ID No 574; 558pp; English.
XX
CC The invention relates to cDNAs encoding novel human endocrine
CC antigens or a fragment having biological activity, a domain, an epitope,
CC full length protein, variant, allelic variant or a species homologue of
CC the cDNA/antigen. The DNAs and polypeptides are useful for preventing,
CC treating or ameliorating a medical condition when administered
CC (e.g. by gene therapy or antisense-therapy). Identifying mutations in
CC the genes coding for the antigens is useful for diagnosing a pathological
CC condition or a susceptibility to a pathological condition. The DNAs,
CC antigens and antibodies raised against the antigens useful for treating,
CC preventing and/ or prognosing disorders related to the endocrine system
CC or hormone imbalance or reproductive disorders, cancers of endocrine
CC tissues, disorders of the pancreas (e.g. diabetes mellitus), the adrenal
CC glands (e.g. hirsutism), ovaries, the thyroid (e.g. hyperthyroidism), the
CC hypothalamus and testes (e.g. vanishing testes syndrome), many examples
CC of diseases and disorders are given in the specification. The present
CC sequence is genomic DNA fragment form a gene encoding an endocrine
CC antigen of the invention.
CC Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic
CC format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 14637 BP; 3010 A; 4364 C; 4199 G; 3064 T; 0 other;

Query Match 7.1%; Score 71; DB 22; Length 14637;
Best Local Similarity 55.0%; Pred. No. 3.3e-11;
Matches 389; Conservative 0; Mismatches 275; Indels 43; Gaps 11;

Qy 297 GAAGTATAAGGGATGAGGTCTAGTCATGGGCCATGGAGCCTTTCTCATTAATCTTGGCTG 356
Db 5626 GCAGCATGAGGTGGGGAGACTGTAATGGTCAAGGGGTCACTTTCTGACGGCCATTGGGTG 5567

Qy 357 TCTGCCTTCTAGGGAATA-TAATCAACACTAATAA-AGGAGGAAGGTGAGCAGCTGGCGC 414
Db 5566 TCCACCTTCCAGGGCAGACTCATCAACTTTGAGAAGAGGAGGAAGGTAAGCAGCTGCAGG 5507

Qy 415 TGTCGCTTTGAGGGAGGATGGCGATGTGAAAGTCAGTGACCACCGTGGGGAGGACACTCC 474

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Db   5451 CTCCTACCCTCTCCTTAGATTCATGGGACATGGGACATTTGGACACAGAGAGAAG--GGG 5394

Qy    535 GACCCATCCCAATGGAGGGTTTGATTAGATGAATATAATCAATGATAAATTCCTAGAGGA 594
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Db   5393 GTCCCCTCCCACTGGAGGGTGAGGGTAGGAGGTTATAATCCAGGACCACCTCCTG----- 5339

Qy    595 GGGACTTTTTATAATCAACTCTGAGAACAGGTTGGAGCTACATGGGATTGGAGGGGAGGG 654
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Db   5338 GGGAGTGGCTGAGCCCAACTTTGAGAACAGGAAGGC-CTGGATGGGAGTAGAGGGGGGGA 5280

Qy    655 TGGAGCCCCTTAAAAGAAAAGCCCCAGAGACTGCCCCTGCCCTCTCTCTCCCCCACAAGT 714
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Db   5279 AGGGACCCC--AAGAACAAAGACCCAGAGACTGGCCCCTGTGCTGCCCGGGGGGCCTTGT 5222

Qy    715 TCCATTTATTATCTTCCACCCAGGAGCTGTCAGAATCCTGCCCTTCCGTCTCCAGATCAA 774
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Qy    894 GCTTAGGAG-ATTAGCGGAGGGTAGAAGAACACTCTGTCTTGTGACCAGCTTCAGAGAGC 952
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Qy    953 CTGGGGCCATGGCTTCCTGGTCAACATTAGGCCCTGCTGCATGGTGA 999
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Db   5004 CAGCAGCTATGAC-CCATGGTCAGCCTCAGCCCCTGTTGCCTGAGGA 4959


RESULT 3
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ID   ABL68560 standard; DNA; 267156 BP.
XX
AC   ABL68560;
XX
DT   15-MAY-2002  (first entry)
XX
DE   Kidney cancer related gene sequence SEQ ID NO:6897.
XX
KW   Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW   stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW   cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW   gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200194629-A2.
XX
PD   13-DEC-2001.
XX
PF   30-MAY-2001; 2001WO-US10838.
XX
PR   05-JUN-2000; 2000US-209473P.
PR   05-JUN-2000; 2000US-209531P.
PR   18-SEP-2000; 2000US-233133P.
PR   18-SEP-2000; 2000US-233617P.
PR   20-SEP-2000; 2000US-234009P.
PR   20-SEP-2000; 2000US-234034P.
PR   20-SEP-2000; 2000US-234052P.
PR   22-SEP-2000; 2000US-234509P.
PR   22-SEP-2000; 2000US-234567P.
PR   25-SEP-2000; 2000US-234923P.
PR   25-SEP-2000; 2000US-234924P.
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PR   25-SEP-2000; 2000US-235082P.
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PR   27-SEP-2000; 2000US-235711P.
PR   27-SEP-2000; 2000US-235720P.
PR   27-SEP-2000; 2000US-235840P.
PR   27-SEP-2000; 2000US-235863P.
PR   28-SEP-2000; 2000US-236028P.
PR   28-SEP-2000; 2000US-236032P.
PR   28-SEP-2000; 2000US-236033P.
PR   28-SEP-2000; 2000US-236034P.
PR   28-SEP-2000; 2000US-236109P.
PR   28-SEP-2000; 2000US-236111P.
PR   29-SEP-2000; 2000US-236842P.
PR   29-SEP-2000; 2000US-236891P.
PR   02-OCT-2000; 2000US-237172P.
PR   02-OCT-2000; 2000US-237173P.
PR   02-OCT-2000; 2000US-237278P.
PR   02-OCT-2000; 2000US-237294P.
PR   02-OCT-2000; 2000US-237295P.
PR   02-OCT-2000; 2000US-237316P.
PR   03-OCT-2000; 2000US-237425P.
PR   03-OCT-2000; 2000US-237598P.
PR   03-OCT-2000; 2000US-237604P.
PR   03-OCT-2000; 2000US-237606P.
PR   03-OCT-2000; 2000US-237608P.
PR   01-NOV-2000; 2000US-244867P.
PR   01-NOV-2000; 2000US-245084P.
XX
PA   (AVAL-) AVALON PHARM.
XX
PI   Young PE,  Augustus M,  Carter KC,  Ebner R,  Endress G,  Horrigan S;
PI   Soppet DR,  Weaver Z;
XX
DR   WPI; 2002-188264/24.
XX
PT   Screening for anti-neoplastic agent involves exposing cells to a
PT   chemical agent to be tested for anti-neoplastic activity, and
PT   determining a change in expression of a gene of a signature gene set -
XX
PS   Claim 1; SEQ ID 6897; 44pp; English.
XX
CC   The present invention describes a method (M1) for screening for an
CC   anti-neoplastic agent. The method involves exposing cells to a chemical
CC   agent to be tested for anti-neoplastic activity, determining a change in
CC   expression of at least one gene (I) of a signature gene set, where (I)
CC   comprises a sequence (S) selected from 8447 sequences (given in ABL61664
CC   to ABL70110), or is at least 95% identical to (S), where a change in
CC   expression is indicative of anti-neoplastic activity. (I) has cytostatic
CC   activity and can be used in gene therapy. M1 can be used for screening
CC   an anti-neoplastic agent, and can be used for producing a product which
CC   is the data collected with respect to the anti-neoplastic agent as a
CC   result of M1, and the data is sufficient to convey the chemical
CC   structure and/or properties of the agent. M1 can be used in the
CC   treatment of cancer such as colon, breast, stomach, lung, thyroid,
CC   oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC   adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
CC   infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
CC   carcinoma, papillary carcinoma and Wilm's tumour.
XX
SQ   Sequence 267156 BP; 76527 A; 56343 C; 55787 G; 78499 T; 0 other;

  Query Match             5.9%;  Score 58.6;  DB 24;  Length 267156;
  Best Local Similarity   64.1%;  Pred. No. 1.6e-06;
  Matches  139;  Conservative    0;  Mismatches   69;  Indels    9;  Gaps    3;

Qy       1 AGCAACCTGTAAGTTCGGGCTGCAATCATAGATAAGTAAGATGGAAGCTTGTATGGGCAG 60
           |||| |||| ||  | | ||||||| ||||| |||| ||| ||||| |||| ||||| |
Db   43125 AGCATCCTGAAATATTGAGCTGCAAACATAGGTAAGAAAGCTGGAAACTTGCATGGGGA- 43183
```

```
Qy      61 GGATGGCTGCAGCTTCATGGATAGAAATGTCCAGCTT--GGGCTAGATACATCCAACATG 118
           |||| |||||||| ||   | ||||| |     | |  |||| ||  |  |||| |||
Db   43184 -GATGCCTGCAGCTACACCAAAAGAAAAGGTGTACCTGGGGGCCAGGCATGTCCACCATA 43242

Qy     119 GGGGCTCCA-----CTCCTCTTTGTAGCACACGCACCATAGGAAAGAGATAAGCAACTTG 173
           |  ||| ||     |   | ||  ||||||| | ||  || |||||| ||  ||||| ||
Db   43243 GAAGCTTCATCTTCCCTTTTTTGTTAGCACATGTACAGTAAGAAAGAAATGGGCAACATG 43302

Qy     174 GAGTAGCTCAAAAGTCACGGAGCCTCAGTGTCCCTTC 210
           | | ||||||      | ||||   |  | |  | ||
Db   43303 GTGCAGCTCAGGCCAGAGGGAGTAGCTATTTGTCCTC 43339


RESULT 4
ABK27453
ID   ABK27453 standard; cDNA; 983 BP.
XX
AC   ABK27453;
XX
DT   09-APR-2002  (first entry)
XX
DE   Colon cancer associated cDNA, CATX-1.
XX
KW   Human; colon cancer; tumour; abnormal cell growth; melanoma;
KW   cervical cancer; colorectal adenocarcinoma; Wilms' tumour; leukaemia;
KW   lymphoma; antisense therapy; CATX; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200111047-A2.
XX
PD   15-FEB-2001.
XX
PF   08-AUG-2000; 2000WO-US21606.
XX
PR   09-AUG-1999;   99US-147933P.
XX
PA   (FARB ) BAYER CORP.
XX
PI   Bowman BM,  Wang K;
XX
DR   WPI; 2002-121548/16.
XX
PT   New isolated nucleic acid involved in growth regulation in human
PT   colonic epithelial cells, termed CATX, for diagnosing and treating
PT   abnormal cell growth, and for use as a probe/primer for detecting
PT   tumours  -
XX
PS   Claim 13; Page 114-115; 130pp; English.
XX
CC   The invention relates to an isolated nucleic acid (I) involved in growth
CC   regulation in human colonic epithelial cells, termed CATX. (I) is useful
CC   as a probe/primer for detecting tumours, preferably colon cancer. The
CC   nucleic acid, encoded polypeptide and antibody are useful in diagnosis
CC   and treatment of abnormal cell growth (such as cervical cancer,
CC   melanomas, colorectal adenocarcinomas, Wilms' tumour, leukaemias and
CC   lymphomas), in screening assays for the treatment of abnormal cell
CC   growth, for raising antibodies, and to screen for peptide analogues and
CC   antagonists. (I) is useful as a biomarker for human tumour cells, e.g.,
CC   colon cancer cells, for generating probes and primers designed for
CC   identifying and/or cloning homologues in other cell types, in antisense
CC   therapy, and in tissue profiling. (I) identifies cancer cells at an early
CC   stage of development, so that premalignant cells can be identified prior
CC   to their spreading throughout the human body. (I) allows early detection
CC   of potentially cancerous conditions, and treatment of the cancerous
CC   conditions prior to spread of the cancer cells throughout the body, or
CC   prior to development of an irreversible cancerous condition. ABK27426-
CC   ABK27469 represent human colon cancer associated coding sequences and
CC   primers of the invention.
CC   Note: This sequence is claimed as a polypeptide in the specification.
XX
SQ   Sequence 983 BP; 279 A; 224 C; 219 G; 261 T; 0 other;

  Query Match             5.5%;  Score 55.2;  DB 24;  Length 983;
  Best Local Similarity   63.4%;  Pred. No. 8.1e-07;
  Matches  118;  Conservative    0;  Mismatches   63;  Indels    5;  Gaps    2;

Qy       1 AGCAACCTGTAAGTTCGGGCTGCAATCATAGATAAGTAAGATGGAAGCTTGTATGGGCAG 60
           || | |||| ||  ||  ||||||| ||||| |||| ||| |||||  ||| |  ||  |
Db     456 AGTAGCCTGAAAAATCTAGCTGCAAACATAGGTAAGCAAGCTGGAACATTGCACAGG--G 513

Qy      61 GGATGGCTGCAGCTTCATGGATAGAAATGTCCAGCTTGGGCTAGATACATCCAACATGGG 120
           | |||   ||||||   |  |||||||  |    |    |||| ||  |  |||| |||||
Db     514 GAATGCTGGCAGCTGTGTCAATAGAAAAGGGTACTGGGGGCCAGGCATGTCCATCATGGA 573

Qy     121 GGCTCCACT---CCTCTTTGTAGCACACGCACCATAGGAAAGAGATAAGCAACTTGGAGT 177
           ||| ||     | | ||  ||||||  | ||  || ||||||  |  ||||| |||
Db     574 AGCTTCATCTTCCTTTTTGTTAGCACGTGTACAGTAAGAAAGAAGTGGGCAACATGGCAC 633

Qy     178 AGCTCA 183
           |||| |
Db     634 AGCTTA 639


RESULT 5
ABK27467
ID   ABK27467 standard; cDNA; 1028 BP.
XX
AC   ABK27467;
XX
DT   09-APR-2002  (first entry)
XX
DE   DNA encoding colon cancer associated protein, CATX-10.
XX
KW   Human; colon cancer; tumour; abnormal cell growth; melanoma;
KW   cervical cancer; colorectal adenocarcinoma; Wilms' tumour; leukaemia;
KW   lymphoma; antisense therapy; CATX; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200111047-A2.
XX
PD   15-FEB-2001.
XX
PF   08-AUG-2000; 2000WO-US21606.
XX
PR   09-AUG-1999;   99US-147933P.
XX
PA   (FARB ) BAYER CORP.
XX
PI   Bowman BM,  Wang K;
XX
DR   WPI; 2002-121548/16.
XX
PT   New isolated nucleic acid involved in growth regulation in human
PT   colonic epithelial cells, termed CATX, for diagnosing and treating
PT   abnormal cell growth, and for use as a probe/primer for detecting
PT   tumours  -
XX
PS   Claim 1; Page 126; 130pp; English.
XX
CC   The invention relates to an isolated nucleic acid (I) involved in growth
CC   regulation in human colonic epithelial cells, termed CATX. (I) is useful
CC   as a probe/primer for detecting tumours, preferably colon cancer. The
CC   nucleic acid, encoded polypeptide and antibody are useful in diagnosis
CC   and treatment of abnormal cell growth (such as cervical cancer,
CC   melanomas, colorectal adenocarcinomas, Wilms' tumour, leukaemias and
CC   lymphomas), in screening assays for the treatment of abnormal cell
CC   growth, for raising antibodies, and to screen for peptide analogues and
CC   antagonists. (I) is useful as a biomarker for human tumour cells, e.g.,
CC   colon cancer cells, for generating probes and primers designed for
CC   identifying and/or cloning homologues in other cell types, in antisense
CC   therapy, and in tissue profiling. (I) identifies cancer cells at an early
CC   stage of development, so that premalignant cells can be identified prior
CC   to their spreading throughout the human body. (I) allows early detection
CC   of potentially cancerous conditions, and treatment of the cancerous
```

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CC   conditions prior to spread of the cancer cells throughout the body, or
CC   prior to development of an irreversible cancerous condition. ABK27426-
CC   ABK27469 represent human colon cancer associated coding sequences and
CC   primers of the invention.
XX
SQ   Sequence 1028 BP; 295 A; 225 C; 237 G; 271 T; 0 other;

  Query Match             5.5%;  Score 55.2;  DB 24;  Length 1028;
  Best Local Similarity   63.4%;  Pred. No. 8.3e-07;
  Matches  118;  Conservative    0;  Mismatches   63;  Indels    5;  Gaps    2;

Qy       1 AGCAACCTGTAAGTTCGGGCTGCAATCATAGATAAGTAAGATGGAAGCTTGTATGGGCAG 60
           || | |||| ||  ||  ||||||| ||||| |||| ||| |||||  ||| |  ||  |
Db     456 AGTAGCCTGAAAAATCTAGCTGCAAACATAGGTAAGCAAGCTGGAACATTGCACAGG--G 513

Qy      61 GGATGGCTGCAGCTTCATGGATAGAAATGTCCAGCTTGGGCTAGATACATCCAACATGGG 120
           | |||   ||||||   |  ||||||| |   |    |||| ||  |  |||| |||||
Db     514 GAATGCTGGCAGCTGTGTCAATAGAAAAGGGTACTGGGGGCCAGGCATGTCCATCATGGA 573

Qy     121 GGCTCCACT---CCTCTTTGTAGCACACGCACCATAGGAAAGAGATAAGCAACTTGGAGT 177
            ||| ||     | | ||  |||||  | ||  || ||||||  |  ||||| |||
Db     574 AGCTTCATCTTCCTTTTTGTTAGCACGTGTACAGTAAGAAAGAAGTGGGCAACATGGCAC 633

Qy     178 AGCTCA 183
           |||| | |
Db     634 AGCTTA 639


RESULT 6
AAS68813
ID   AAS68813 standard; cDNA; 1182 BP.
XX
AC   AAS68813;
XX
DT   13-FEB-2002 (first entry)
XX
DE   DNA encoding novel human diagnostic protein #4617.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG04626.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity -
XX
PS   Claim 1; SEQ ID No 4617; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 1182 BP; 292 A; 313 C; 301 G; 276 T; 0 other;

  Query Match             5.5%;  Score 54.8;  DB 23;  Length 1182;
  Best Local Similarity   52.1%;  Pred. No. 1.2e-06;
  Matches  197;  Conservative    0;  Mismatches  172;  Indels    9;  Gaps    3;

Qy     516 GATACACAGAGAAGGAGGAGACCCATCCCAATG----GAGGGTTTGATTAGATGAATATA 571
           || ||| |||||| |||||||| |  |   | |    |  |||  || ||   |  |  |
Db     664 GAGACAGAGAGAAAGAGGAGACACTCCAGGAAGACCTGCAGGTGGGAGTACCAGGTTGAA 723

Qy     572 ATCAATGATAAATTCCTAGAGGAGGGACTTTTTATAATCAACTCTGAGAACAGGTTGGAG 631
           | ||| || | |||||| ||||||   || |||  |  || ||||||||||||||| ||
Db     724 ACCAAGGACACATTCCTGGAGGAGCTGCTGTTT-GAGCCAGCTCTGAGAACAGGTGGGGA 782

Qy     632 CTACATGGGATTGGAGGGGAGGGTGGAGCCCCTTAAAAGAAAAGCCCCAGAGACTGCCCC 691
           |   |  |||  ||||| | ||||          |||||   ||| |     |  |
Db     783 CAGGACTGGAGAGGAGGAGGGGGTCCCCTATGAGCAAAGACTGGCCACCACCCCATCTAA 842

Qy     692 TGCCCTCTCTCTCCCCCACAAGTTCCATTTATTATCTTCCACCCAGGAGCTGTCAGAATC 751
             ||| | |    ||||    |  | |     ||     ||    | |   |||  |
Db     843 CACCCCCACAGGGCCCCTGTGGCATCCCTG----TCCAGTCCCTGTCACCACCCAGTTTT 898

Qy     752 CTGCCCTTCCGTCTCCAGATCAAAGTCCTTCAGGAAATGCAACTACTTCAGTGACAAGAG 811
             | ||     |   |  |||||||     ||||  | ||          ||||   |
Db     899 TCCCTCTGGACCCAGGAATTCAAAGTAAGCAAGGAGGTCCACTGCTCCAGTTGACTGCAA 958

Qy     812 ATAATTATCATCTTCTGACAGAGGAGGAATTTGGGGTTTGGTCCCAGTCCATGAAGTGGC 871
           |||||||  | |||  | |  || || | ||||||   ||||    | ||||||| |||
Db     959 ATAATTACAACCTTGAGCCCAAGCAGCACTTTGGGTCCTGGTTTGGGACCATGAAGCGGC 1018

Qy     872 ACAGTCAGAATAAAAGGT 889
           | |     | ||  |||
Db    1019 TCGGCAGCCAGAAGGGGT 1036


RESULT 7
AAS78330
ID   AAS78330 standard; cDNA; 1182 BP.
XX
AC   AAS78330;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #14134.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
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XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG14143.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity  -
XX
PS   Claim 1; SEQ ID No 14134; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 1182 BP; 292 A; 313 C; 301 G; 276 T; 0 other;

  Query Match             5.5%;  Score 54.8;  DB 23;  Length 1182;
  Best Local Similarity   52.1%;  Pred. No. 1.2e-06;
  Matches  197;  Conservative    0;  Mismatches  172;  Indels    9;  Gaps    3;

Qy     516 GATACACAGAGAAGGAGGAGACCCATCCCAATG----GAGGGTTTGATTAGATGAATATA 571
           || ||| |||||| |||||||| |  |   | |    |  |||  || ||   |  |  |
Db     664 GAGACAGAGAGAAAGAGGAGACACTCCAGGAAGACCTGCAGGTGGGAGTACCAGGTTGAA 723

Qy     572 ATCAATGATAAATTCCTAGAGGAGGGACTTTTTATAATCAACTCTGAGAACAGGTTGGAG 631
           | ||| || | |||||| ||||||   || |||  |  || ||||||||||||||| ||
Db     724 ACCAAGGACACATTCCTGGAGGAGCTGCTGTTT-GAGCCAGCTCTGAGAACAGGTGGGGA 782

Qy     632 CTACATGGGATTGGAGGGGAGGGTGGAGCCCCTTAAAAGAAAAGCCCCAGAGACTGCCCC 691
           |   |  |||  ||||| | ||||          |||||   ||| |     |  |
Db     783 CAGGACTGGAGAGGAGGAGGGGGTCCCCTATGAGCAAAGACTGGCCACCACCCCATCTAA 842

Qy     692 TGCCCTCTCTCTCCCCCACAAGTTCCATTTATTATCTTCCACCCAGGAGCTGTCAGAATC 751
             ||| | |    ||||    |   | |     ||     ||    | |   |||  |
Db     843 CACCCCCACAGGGCCCCTGTGGCATCCCTG----TCCAGTCCCTGTCACCACCCAGTTTT 898

Qy     752 CTGCCCTTCCGTCTCCAGATCAAAGTCCTTCAGGAAATGCAACTACTTCAGTGACAAGAG 811
           | ||      |   |  |||||||     ||||  | ||          ||||   |
Db     899 TCCCTCTGGACCCAGGAATTCAAAGTAAGCAAGGAGGTCCACTGCTCCAGTTGACTGCAA 958

Qy     812 ATAATTATCATCTTCTGACAGAGGAGGAATTTGGGGTTTGGTCCCAGTCCATGAAGTGGC 871
           |||||||  | |||  | |  || || | ||||||   ||||    | |||||||| |||
Db     959 ATAATTACAACCTTGAGCCCAAGCAGCACTTTGGGTCCTGGTTTGGGACCATGAAGCGGC 1018

Qy     872 ACAGTCAGAATAAAAGGT 889
           | |     | ||  |||
Db    1019 TCGGCAGCCAGAAGGGGT 1036


RESULT 8
AAS67319
ID   AAS67319 standard; cDNA; 1185 BP.
XX
AC   AAS67319;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #3123.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG03132.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity  -
XX
PS   Claim 1; SEQ ID No 3123; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 1185 BP; 294 A; 314 C; 301 G; 276 T; 0 other;

  Query Match             5.5%;  Score 54.8;  DB 23;  Length 1185;
  Best Local Similarity   52.1%;  Pred. No. 1.2e-06;
  Matches  197;  Conservative    0;  Mismatches  172;  Indels    9;  Gaps    3;

Qy     516 GATACACAGAGAAGGAGGAGACCCATCCCAATG----GAGGGTTTGATTAGATGAATATA 571
           || ||| |||||| ||||||||  |  |   | |    |  |||  || ||   |  |  |
Db     667 GAGACAGAGAGAAAGAGGAGACACTCCAGGAAGACCTGCAGGTGGGAGTACCAGGTTGAA 726

Qy     572 ATCAATGATAAATTCCTAGAGGAGGGACTTTTTATAATCAACTCTGAGAACAGGTTGGAG 631
           | ||| || | |||||| ||||||   || |||  |  || ||||||||||||||| ||
Db     727 ACCAAGGACACATTCCTGGAGGAGCTGCTGTTT-GAGCCAGCTCTGAGAACAGGTGGGGA 785
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Qy     632 CTACATGGGATTGGAGGGGAGGGTGGAGCCCCTTAAAAGAAAAGCCCCAGAGACTGCCCC 691
Db     786 CAGGACTGGAGAGGAGGAGGGGGTCCCCTATGAGCAAAGACTGGCCACCACCCCATCTAA 845

Qy     692 TGCCCTCTCTCTCCCCCACAAGTTCCATTTATTATCTTCCACCCAGGAGCTGTCAGAATC 751
Db     846 CACCCCCACAGGGCCCCTGTGGCATCCCTG----TCCAGTCCCTGTCACCACCCAGTTTT 901

Qy     752 CTGCCCTTCCGTCTCCAGATCAAAGTCCTTCAGGAAATGCAACTACTTCAGTGACAAGAG 811
Db     902 TCCCTCTGGACCCAGGAATTCAAAGTAAGCAAGGAGGTCCACTGCTCCAGTTGACTGCAA 961

Qy     812 ATAATTATCATCTTCTGACAGAGGAGGAATTTGGGGTTTGGTCCCAGTCCATGAAGTGGC 871
Db     962 ATAATTACAACCTTGAGCCCAAGCAGCACTTTGGGTCCTGGTTTGGGACCATGAAGCGGC 1021

Qy     872 ACAGTCAGAATAAAAGGT 889
Db    1022 TCGGCAGCCAGAAGGGGT 1039
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RESULT 9
AAS78107
ID AAS78107 standard; cDNA; 1503 BP.
XX
AC AAS78107;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #13911.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG13920.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 13911; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 1503 BP; 297 A; 409 C; 502 G; 295 T; 0 other;

Query Match 5.3%; Score 53; DB 23; Length 1503;
Best Local Similarity 70.2%; Pred. No. 5.2e-06;
Matches 99; Conservative 0; Mismatches 40; Indels 2; Gaps 2;

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Qy     755 CCCTTCCGTCTCCAGATCAAAGTCCTTCAGGAAATGCAACTACTTCAG-TGACAAGAGAT 813
Db     230 CTCTGGCTGCAGGAGATCAAAGCCTTCCAGGAGATGCAGCTGCTTCAGCTGTCTGCAGAC 289

Qy     814 AATTATCATCTTCTGACAGAGGAGGAATTTGGGGTTTGGTCCCAGTCCATGAAGTGGC-A 872
Db     290 AATTATCACCTTCAGCCTGTGGGGCAATTTTGGGTCTGCCTCCAGTTAATGGAGTGGCTC 349

Qy     873 CAGTCAGAATAAAAGGTGAGA 893
Db     350 CAGTAAGACTGAGAGGTGAAA 370
```

RESULT 10
AAS65934
ID AAS65934 standard; cDNA; 893 BP.
XX
AC AAS65934;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #1738.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG01747.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 1738; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or

```
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 893 BP; 235 A; 189 C; 230 G; 239 T; 0 other;

  Query Match             5.2%;  Score 52;  DB 23;  Length 893;
  Best Local Similarity   70.0%;  Pred. No. 8.1e-06;
  Matches   84;  Conservative    0;  Mismatches   35;  Indels    1;  Gaps    1;

Qy     755 CCCTTCCGTCTCCAGATCAAAGTCCTTCAGGAAATGCAACTACTTCAG-TGACAAGAGAT 813
           | ||  |  |   |||||||| | | ||||| ||||| || |||||| || |   |||
Db     230 CTCTGGCTGCAGGAGATCAAAGCCTTCCAGGAGATGCAGCTGCTTCAGCTGTCTGCAGAC 289

Qy     814 AATTATCATCTTCTGACAGAGGAGGAATTTGGGGTTTGGTCCCAGTCCATGAAGTGGCAC 873
           |||||||| |||| | | | || | ||||| |||| ||   |||||  ||| ||||||
Db     290 AATTATCACCTTCAGCCTGTGGGGCAATTTTGGGTCTGCCTCCAGTTAATGGAGTGGCTC 349


RESULT 11
ABK12708
ID   ABK12708 standard; DNA; 11197 BP.
XX
AC   ABK12708;
XX
DT   18-JUN-2002  (first entry)
XX
DE   Human T1/ST2 receptor binding protein (IL1RL1LG) gene sequence.
XX
KW   Human; T1/ST2 receptor binding protein; IL1RL1LG; cytostatic;
KW   antiarthritic; gene therapy; isogene; single nucleotide polymorphism;
KW   SNP; haplotyping; genotyping; cancer; arthritis; antibody; ASO;
KW   allele-specific oligonucleotide; chromosome 19q13_2; gene; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       replace (3867,A)
FT                   /*tag= a
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "Polymorphic site 1, PS1"
FT   variation       replace (3868,A)
FT                   /*tag= b
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "Polymorphic site 2, PS2"
FT   variation       replace (3904,G)
FT                   /*tag= c
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "Polymorphic site 3, PS3"
FT   variation       replace (3980,A)
FT                   /*tag= d
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "Polymorphic site 4, PS4"
FT   CDS             4002..7198
FT                   /*tag= e
FT                   /product= "Human T1/ST2 receptor binding protein,
FT                        IL1RL1LG"
FT                   /note= "Specifically claimed in claim 25"
FT   exon            4002..4184
FT                   /*tag= f
FT                   /number= 1
FT   variation       replace (4146,C)
FT                   /*tag= g
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "Polymorphic site 5, PS5"
FT   intron          4185..4839
FT                   /*tag= h
FT                   /number= 1
FT   exon            4840..4937
FT                   /*tag= i
FT                   /number= 2
FT   intron          4938..5075
FT                   /*tag= j
FT                   /number= 2
FT   exon            5076..5259
FT                   /*tag= k
FT                   /number= 3
FT   intron          5260..6979
FT                   /*tag= l
FT                   /number= 3
FT   exon            6980..7198
FT                   /*tag= m
FT                   /number= 4
XX
PN   WO200216646-A1.
XX
PD   28-FEB-2002.
XX
PF   22-AUG-2001; 2001WO-US26236.
XX
PR   24-AUG-2000; 2000US-227487P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Kliem SE,  Koshy B,  Lee HH;
XX
DR   WPI; 2002-280949/32.
DR   P-PSDB; AAU78098.
XX
PT   Novel genetic variants of putative T1/ST2 receptor binding protein
PT   useful in studying expression and function of the protein, and for
PT   screening drugs to treat diseases e.g. cancer  -
XX
PS   Claim 1; Fig 1; 71pp; English.
XX
CC   The present invention relates to a new polynucleotide comprising the
CC   putative T1/ST2 receptor binding protein (IL1RL1LG) isogene. The method
CC   of the invention is useful for haplotyping IL1RL1LG gene in an
CC   individual and is also useful for genotyping IL1RL1LG gene of an
CC   individual. Other uses include predicting a haplotype pair for IL1RL1LG
CC   gene of an individual and for identifying an association between a trait
CC   and at least one haplotype or haplotype pair of IL1RL1LG gene. The
CC   polynucleotide is useful in studying the expression and function of
CC   IL1RL1LG, in expressing IL1RL1LG protein for use in screening for
CC   candidate drugs to treat diseases related to IL1RL1LG activity and in
CC   studying the effect of the variation on the biological activity of
CC   IL1RL1LG as well as on the binding affinity of candidate drugs targeting
CC   IL1RL1LG for the treatment of cancer and arthritis. The antibody of the
CC   invention is useful in studying expression of the IL1RL1LG isogenes in
CC   vivo, for in vivo screening and testing of drugs targeted against
CC   IL1RL1LG protein, and for testing the efficacy of therapeutic agents and
CC   compounds for cancer in a biological system. ASO (allele-specific
CC   oligonucleotide) is useful as probes and primers, and for assaying a
CC   polymorphism in the target region. Without requiring any prior knowledge
CC   of the phenotypic effect of any particular IL1RL1LG haplotype or
CC   haplotype pair, the method of the invention provides the scientist with a
CC   tool to identify lead compounds that are more likely to show efficacy in
CC   clinical trials. The present nucleic acid is that of the human T1/ST2
CC   receptor binding protein (IL1RL1LG) gene located on chromosome 19q13.2.
CC   This sequence encodes the human IL1RL1LG protein of the invention and was
CC   used in the methods of the invention for haplotyping the IL1RL1LG gene.
XX
SQ   Sequence 11197 BP; 2643 A; 2988 C; 3257 G; 2304 T; 5 other;

  Query Match             5.0%;  Score 50.2;  DB 24;  Length 11197;
  Best Local Similarity   64.9%;  Pred. No. 0.00013;
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  Matches  124;  Conservative    0;  Mismatches   58;  Indels    9;  Gaps    3;

Qy      1 AGCAACCTGTAAGTTCGGGCTGCAATCATAGATAAGTAAGATGGAAGCTTGTATGGGCAG 60
          |||| |||| ||  ||  ||||||| |||||||||| ||| ||||||||||  | | |  |
Db    810 AGCAGCCTGAAAACTCAAGCTGCAAACATAGATAAGGAAGCTGGAAGCTTGCACGTG--G 867

Qy     61 GGATGGCTGCAGCTTCATGGATAGAAATGTCCAGCTTGG--GCTAGATACATCCAACATG 118
          | |||   |||||| ||   | |||||    |  | |||  || ||  | ||||||||  |
Db    868 GAATGCTGGCAGCTGCACCAACAGAAAATGGCTACCTGGGAGCCAGGCATATCCAACACG 927

Qy    119 GGGGCTCCACTCCTC-----TTTGTAGCACACGCACCATAGGAAAGAGATAAGCAACTTG 173
          | |||||||   | |     ||  || |||  | ||   |   |||| ||  ||||| ||
Db    928 GAGGCTCCATCTCCCCTTTTTTGCTACCACGTGTACAGGAACTAAGAAATGGGCAACATG 987

Qy    174 GAGTAGCTCAA 184
          | |  | ||||
Db    988 GGGCTGGTCAA 998


RESULT 12
ABK83460/c
ID   ABK83460 standard; cDNA; 165199 BP.
XX
AC   ABK83460;
XX
DT   14-AUG-2002  (first entry)
XX
DE   Human cDNA differentially expressed in granulocytic cells #31.
XX
KW   Human; ss; granulocytic cell; DNA chip; bacterial infection;
KW   viral infection; parasitic infection; protozoal infection;
KW   fungal infection; sterile inflammatory disease; psoriasis;
KW   rheumatoid arthritis; glomerulonephritis; asthma; thrombosis;
KW   cardiac reperfusion injury; renal reperfusion injury; ARDS;
KW   adult respiratory distress syndrome; inflammatory bowel disease;
KW   Crohn's disease; ulcerative colitis; periodontal disease;
KW   granulocyte activation; chronic inflammation; allergy.
XX
OS   Homo sapiens.
XX
PN   WO200228999-A2.
XX
PD   11-APR-2002.
XX
PF   03-OCT-2001; 2001WO-US30821.
XX
PR   03-OCT-2000; 2000US-237189P.
XX
PA   (GENE-) GENE LOGIC INC.
XX
PI   Beazer-Barclay Y,  Weissman SM,  Yamaga S,  Vockley J;
XX
DR   WPI; 2002-435328/46.
XX
PT   Detecting granulocyte activation by detecting differential expression
PT   of genes associated with granulocyte activation, which serves as
PT   diagnostic markers that is useful for monitoring disease states and
PT   drug toxicity  -
XX
PS   Claim 1; SEQ ID No 31; 114pp; English.
XX
CC   The invention relates to detecting (M1) granulocyte (GC) activation
CC   (GCA), by detecting the level of expression of gene(s) (Gs) identified by
CC   DNA chip analysis as given in the specification, and comparing
CC   the expression level to an expression level in an unactivated
CC   GC, where differential expression of Gs is indicative of GCA.
CC   Also included are modulating (M2) GA by contacting GC with an agent
CC   that alters the expression of at least one gene in Gs; (2) screening (M3)
CC   for an agent capable of modulating GCA or an inflammation (especially
CC   chronic) in a tissue, an allergic response in a subject, exposure of a
CC   subject to a pathogen or sterile inflammatory disease using the
CC   gene expression profile; (3) detecting (M4) an inflammation (especially
CC   chronic) in a tissue, an allergic response in a subject, exposure of a
CC   subject to a pathogen or sterile inflammatory disease, by detecting the
CC   level of expression in a sample of the tissue of gene(s) from Gs, where
CC   the level of expression of the gene is indicative of inflammation;
CC   (4) treating (M5) an inflammation (especially chronic) or in a tissue,
CC   an allergic response in a subject, exposure of a subject to a pathogen
CC   or sterile inflammatory disease, by contacting a tissue having
CC   inflammation with an agent that modulates the expression of gene(s)
CC   from Gs in the tissue. M1 is useful for detecting GCA; M2 is useful for
CC   modulating GA; M3 is useful for screening an agent capable of modulating
CC   GCA preferably in an inflammation in a tissue; M4 is useful for
CC   detecting an inflammation (especially chronic) in a tissue, an allergic
CC   response in a subject, exposure of a subject to a pathogen or sterile
CC   inflammatory disease (e.g. psoriasis, rheumatoid arthritis,
CC   glomerulonephritis, asthma, thrombosis, cardiac reperfusion injury, renal
CC   reperfusion injury, ARDS, adult respiratory distress syndrome,
CC   inflammatory bowel disease, Crohn's disease, ulcerative colitis,
CC   periodontal disease; also bacterial infection, viral infection,
CC   parasitic infection, protozoal infection, fungal infection and M5 is
CC   useful for treating one of the above conditions. The present
CC   sequence represents a gene differentially expressed in granulocytes.
CC   Note: The sequence data for this patent did not form part
CC   of the printed specification, but was obtained in electronic
CC   format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 165199 BP; 48510 A; 33223 C; 34406 G; 49060 T; 0 other;

  Query Match             5.0%;  Score 50;  DB 24;  Length 165199;
  Best Local Similarity   64.5%;  Pred. No. 0.00069;
  Matches  107;  Conservative    0;  Mismatches   55;  Indels    4;  Gaps    2;

Qy      1 AGCAACCTGTAAGTTCGGGCTGCAATCATAGATAAGTAAGATGGAAGCTTGTATGGGCAG 60
          | || |||| ||  | | |||||||  | |||||||  ||  |||||| || ||||||  |
Db 139981 ATCAGCCTGAAAAATTGAGCTGCAAAAACAGATAAGCAACCTGGAAGTTTTTATGGG--G 139924

Qy     61 GGATGGCTGCAGCTTCATGGATAGAAATGTCCAGCTT--GGGCTAGATACATCCAACATG 118
          | ||| | |||| |   |  |||||||  |  || | |  ||||| |  | ||||||  |||
Db 139923 GAATGCCAGCAGTTGTGTTAATAGAAAAGGGCAACCTGGGGGCTGGGCATATCCAAAATG 139864

Qy    119 GGGGCTCCACTCCTCTTTGTAGCACACGCACCATAGGAAAGAGATA 164
          |||||||||    || || |     ||     ||| |  | ||| |
Db 139863 GGGGCTCCATCTTTCCTTCTTTGTGACCATGTATACGGTAAAGAAA 139818


RESULT 13
ABL61947
ID   ABL61947 standard; DNA; 149480 BP.
XX
AC   ABL61947;
XX
DT   15-MAY-2002  (first entry)
XX
DE   Colon adenocarcinoma related gene sequence SEQ ID NO:284.
XX
KW   Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW   stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW   cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW   gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200194629-A2.
XX
PD   13-DEC-2001.
XX
PF   30-MAY-2001; 2001WO-US10838.
XX
PR   05-JUN-2000; 2000US-209473P.
PR   05-JUN-2000; 2000US-209531P.
PR   18-SEP-2000; 2000US-233133P.
PR   18-SEP-2000; 2000US-233617P.
PR   20-SEP-2000; 2000US-234009P.
PR   20-SEP-2000; 2000US-234034P.
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PR   20-SEP-2000; 2000US-234052P.
PR   22-SEP-2000; 2000US-234509P.
PR   22-SEP-2000; 2000US-234567P.
PR   25-SEP-2000; 2000US-234923P.
PR   25-SEP-2000; 2000US-234924P.
PR   25-SEP-2000; 2000US-235077P.
PR   25-SEP-2000; 2000US-235082P.
PR   25-SEP-2000; 2000US-235134P.
PR   25-SEP-2000; 2000US-235280P.
PR   26-SEP-2000; 2000US-235637P.
PR   26-SEP-2000; 2000US-235638P.
PR   27-SEP-2000; 2000US-235711P.
PR   27-SEP-2000; 2000US-235720P.
PR   27-SEP-2000; 2000US-235840P.
PR   27-SEP-2000; 2000US-235863P.
PR   28-SEP-2000; 2000US-236028P.
PR   28-SEP-2000; 2000US-236032P.
PR   28-SEP-2000; 2000US-236033P.
PR   28-SEP-2000; 2000US-236034P.
PR   28-SEP-2000; 2000US-236109P.
PR   28-SEP-2000; 2000US-236111P.
PR   29-SEP-2000; 2000US-236842P.
PR   29-SEP-2000; 2000US-236891P.
PR   02-OCT-2000; 2000US-237172P.
PR   02-OCT-2000; 2000US-237173P.
PR   02-OCT-2000; 2000US-237278P.
PR   02-OCT-2000; 2000US-237294P.
PR   02-OCT-2000; 2000US-237295P.
PR   02-OCT-2000; 2000US-237316P.
PR   03-OCT-2000; 2000US-237425P.
PR   03-OCT-2000; 2000US-237598P.
PR   03-OCT-2000; 2000US-237604P.
PR   03-OCT-2000; 2000US-237606P.
PR   03-OCT-2000; 2000US-237608P.
PR   01-NOV-2000; 2000US-244867P.
PR   01-NOV-2000; 2000US-245084P.
XX
PA   (AVAL-) AVALON PHARM.
XX
PI   Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
PI   Soppet DR, Weaver Z;
XX
DR   WPI; 2002-188264/24.
XX
PT   Screening for anti-neoplastic agent involves exposing cells to a
PT   chemical agent to be tested for anti-neoplastic activity, and
PT   determining a change in expression of a gene of a signature gene set -
XX
PS   Claim 1; SEQ ID 284; 44pp; English.
XX
CC   The present invention describes a method (M1) for screening for an
CC   anti-neoplastic agent. The method involves exposing cells to a chemical
CC   agent to be tested for anti-neoplastic activity, determining a change in
CC   expression of at least one gene (I) of a signature gene set, where (I)
CC   comprises a sequence (S) selected from 8447 sequences (given in ABL61664
CC   to ABL70110), or is at least 95% identical to (S), where a change in
CC   expression is indicative of anti-neoplastic activity. (I) has cytostatic
CC   activity and can be used in gene therapy. M1 can be used for screening
CC   an anti-neoplastic agent, and can be used for producing a product which
CC   is the data collected with respect to the anti-neoplastic agent as a
CC   result of M1, and the data is sufficient to convey the chemical
CC   structure and/or properties of the agent. M1 can be used in the
CC   treatment of cancer such as colon, breast, stomach, lung, thyroid,
CC   oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC   adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
CC   infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
CC   carcinoma, papillary carcinoma and Wilm's tumour.
XX
SQ   Sequence 149480 BP; 39770 A; 34233 C; 35027 G; 40449 T; 1 other;

  Query Match             4.9%;  Score 48.8;  DB 24;  Length 149480;
  Best Local Similarity   64.5%;  Pred. No. 0.0016;
  Matches   89;  Conservative    0;  Mismatches   47;  Indels    2;  Gaps    1;

Qy       1 AGCAACCTGTAAGTTCGGGCTGCAATCATAGATAAGTAAGATGGAAGCTTGTATGGGCAG 60
             |||| || ||||  ||| |||| |  |||||  |||  || |||||||||  | |||
Db   55060 AGCAGCCAGTAAAATCGAGCTGTAGACATAGTCAAGGGAGCTGGAAGCTTACACGGG--T 55117

Qy      61 GGATGGCTGCAGCTTCATGGATAGAAATGTCCAGCTTGGGCTAGATACATCCAACATGGG 120
           | |||   ||||||      |||| ||    |  | ||| |||| ||  | ||| ||||
Db   55118 GAATGCTGGCAGCTGTGCCCATAGGAAAAGGCCACCTGGTCTAGGTATGTTCAAAATGGC 55177

Qy     121 GGCTCCACTCCTCTTTGT 138
           |||||||| |  | || |
Db   55178 GGCTCCACGCTCCCTTCT 55195


RESULT 14
ABL61948
ID   ABL61948 standard; DNA; 149480 BP.
XX
AC   ABL61948;
XX
DT   15-MAY-2002  (first entry)
XX
DE   Colon adenocarcinoma related gene sequence SEQ ID NO:285.
XX
KW   Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW   stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW   cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW   gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200194629-A2.
XX
PD   13-DEC-2001.
XX
PF   30-MAY-2001; 2001WO-US10838.
XX
PR   05-JUN-2000; 2000US-209473P.
PR   05-JUN-2000; 2000US-209531P.
PR   18-SEP-2000; 2000US-233133P.
PR   18-SEP-2000; 2000US-233617P.
PR   20-SEP-2000; 2000US-234009P.
PR   20-SEP-2000; 2000US-234034P.
PR   20-SEP-2000; 2000US-234052P.
PR   22-SEP-2000; 2000US-234509P.
PR   22-SEP-2000; 2000US-234567P.
PR   25-SEP-2000; 2000US-234923P.
PR   25-SEP-2000; 2000US-234924P.
PR   25-SEP-2000; 2000US-235077P.
PR   25-SEP-2000; 2000US-235082P.
PR   25-SEP-2000; 2000US-235134P.
PR   25-SEP-2000; 2000US-235280P.
PR   26-SEP-2000; 2000US-235637P.
PR   26-SEP-2000; 2000US-235638P.
PR   27-SEP-2000; 2000US-235711P.
PR   27-SEP-2000; 2000US-235720P.
PR   27-SEP-2000; 2000US-235840P.
PR   27-SEP-2000; 2000US-235863P.
PR   28-SEP-2000; 2000US-236028P.
PR   28-SEP-2000; 2000US-236032P.
PR   28-SEP-2000; 2000US-236033P.
PR   28-SEP-2000; 2000US-236034P.
PR   28-SEP-2000; 2000US-236109P.
PR   28-SEP-2000; 2000US-236111P.
PR   29-SEP-2000; 2000US-236842P.
PR   29-SEP-2000; 2000US-236891P.
PR   02-OCT-2000; 2000US-237172P.
PR   02-OCT-2000; 2000US-237173P.
PR   02-OCT-2000; 2000US-237278P.
PR   02-OCT-2000; 2000US-237294P.
PR   02-OCT-2000; 2000US-237295P.
PR   02-OCT-2000; 2000US-237316P.
PR   03-OCT-2000; 2000US-237425P.
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PR   03-OCT-2000; 2000US-237598P.
PR   03-OCT-2000; 2000US-237604P.
PR   03-OCT-2000; 2000US-237606P.
PR   03-OCT-2000; 2000US-237608P.
PR   01-NOV-2000; 2000US-244867P.
PR   01-NOV-2000; 2000US-245084P.
XX
PA   (AVAL-) AVALON PHARM.
XX
PI   Young PE,  Augustus M,  Carter KC,  Ebner R,  Endress G,  Horrigan S;
PI   Soppet DR,  Weaver Z;
XX
DR   WPI; 2002-188264/24.
XX
PT   Screening for anti-neoplastic agent involves exposing cells to a
PT   chemical agent to be tested for anti-neoplastic activity, and
PT   determining a change in expression of a gene of a signature gene set -
XX
PS   Claim 1; SEQ ID 285; 44pp; English.
XX
CC   The present invention describes a method (M1) for screening for an
CC   anti-neoplastic agent. The method involves exposing cells to a chemical
CC   agent to be tested for anti-neoplastic activity, determining a change in
CC   expression of at least one gene (I) of a signature gene set, where (I)
CC   comprises a sequence (S) selected from 8447 sequences (given in ABL61664
CC   to ABL70110), or is at least 95% identical to (S), where a change in
CC   expression is indicative of anti-neoplastic activity. (I) has cytostatic
CC   activity and can be used in gene therapy. M1 can be used for screening
CC   an anti-neoplastic agent, and can be used for producing a product which
CC   is the data collected with respect to the anti-neoplastic agent as a
CC   result of M1, and the data is sufficient to convey the chemical
CC   structure and/or properties of the agent. M1 can be used in the
CC   treatment of cancer such as colon, breast, stomach, lung, thyroid,
CC   oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC   adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
CC   infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
CC   carcinoma, papillary carcinoma and Wilm's tumour.
XX
SQ   Sequence 149480 BP; 39770 A; 34233 C; 35027 G; 40449 T; 1 other;

  Query Match             4.9%;  Score 48.8;  DB 24;  Length 149480;
  Best Local Similarity   64.5%;  Pred. No. 0.0016;
  Matches   89;  Conservative    0;  Mismatches   47;  Indels    2;  Gaps    1;

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Db   55060 AGCAGCCAGTAAAATCGAGCTGTAGACATAGTCAAGGGAGCTGGAAGCTTACACGGG--T 55117

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Qy     121 GGCTCCACTCCTCTTTGT 138
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Db   55178 GGCTCCACGCTCCCTTCT 55195


RESULT 15
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ID   ABL68365 standard; DNA; 149480 BP.
XX
AC   ABL68365;
XX
DT   15-MAY-2002  (first entry)
XX
DE   Kidney cancer related gene sequence SEQ ID NO:6702.
XX
KW   Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW   stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW   cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW   gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200194629-A2.
XX
PD   13-DEC-2001.
XX
PF   30-MAY-2001; 2001WO-US10838.
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PR   05-JUN-2000; 2000US-209473P.
PR   05-JUN-2000; 2000US-209531P.
PR   18-SEP-2000; 2000US-233133P.
PR   18-SEP-2000; 2000US-233617P.
PR   20-SEP-2000; 2000US-234009P.
PR   20-SEP-2000; 2000US-234034P.
PR   20-SEP-2000; 2000US-234052P.
PR   22-SEP-2000; 2000US-234509P.
PR   22-SEP-2000; 2000US-234567P.
PR   25-SEP-2000; 2000US-234923P.
PR   25-SEP-2000; 2000US-234924P.
PR   25-SEP-2000; 2000US-235077P.
PR   25-SEP-2000; 2000US-235082P.
PR   25-SEP-2000; 2000US-235134P.
PR   25-SEP-2000; 2000US-235280P.
PR   26-SEP-2000; 2000US-235637P.
PR   26-SEP-2000; 2000US-235638P.
PR   27-SEP-2000; 2000US-235711P.
PR   27-SEP-2000; 2000US-235720P.
PR   27-SEP-2000; 2000US-235840P.
PR   27-SEP-2000; 2000US-235863P.
PR   28-SEP-2000; 2000US-236028P.
PR   28-SEP-2000; 2000US-236032P.
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PR   28-SEP-2000; 2000US-236111P.
PR   29-SEP-2000; 2000US-236842P.
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PR   02-OCT-2000; 2000US-237172P.
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PR   02-OCT-2000; 2000US-237278P.
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PR   02-OCT-2000; 2000US-237295P.
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PR   03-OCT-2000; 2000US-237598P.
PR   03-OCT-2000; 2000US-237604P.
PR   03-OCT-2000; 2000US-237606P.
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PR   01-NOV-2000; 2000US-244867P.
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XX
PA   (AVAL-) AVALON PHARM.
XX
PI   Young PE,  Augustus M,  Carter KC,  Ebner R,  Endress G,  Horrigan S;
PI   Soppet DR,  Weaver Z;
XX
DR   WPI; 2002-188264/24.
XX
PT   Screening for anti-neoplastic agent involves exposing cells to a
PT   chemical agent to be tested for anti-neoplastic activity, and
PT   determining a change in expression of a gene of a signature gene set -
XX
PS   Claim 1; SEQ ID 6702; 44pp; English.
XX
CC   The present invention describes a method (M1) for screening for an
CC   anti-neoplastic agent. The method involves exposing cells to a chemical
CC   agent to be tested for anti-neoplastic activity, determining a change in
CC   expression of at least one gene (I) of a signature gene set, where (I)
CC   comprises a sequence (S) selected from 8447 sequences (given in ABL61664
CC   to ABL70110), or is at least 95% identical to (S), where a change in
CC   expression is indicative of anti-neoplastic activity. (I) has cytostatic
CC   activity and can be used in gene therapy. M1 can be used for screening
CC   an anti-neoplastic agent, and can be used for producing a product which
CC   is the data collected with respect to the anti-neoplastic agent as a
```

CC result of M1, and the data is sufficient to convey the chemical
CC structure and/or properties of the agent. M1 can be used in the
CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
CC carcinoma, papillary carcinoma and Wilm's tumour.
XX
SQ Sequence 149480 BP; 39770 A; 34233 C; 35027 G; 40449 T; 1 other;

Query Match 4.9%; Score 48.8; DB 24; Length 149480;
Best Local Similarity 64.5%; Pred. No. 0.0016;
Matches 89; Conservative 0; Mismatches 47; Indels 2; Gaps 1;

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Qy       1 AGCAACCTGTAAGTTCGGGCTGCAATCATAGATAAGTAAGATGGAAGCTTGTATGGGCAG 60
           |||| || ||||  ||| |||| |  |||||  |||  || |||||||||  | |||
Db   55060 AGCAGCCAGTAAAATCGAGCTGTAGACATAGTCAAGGGAGCTGGAAGCTTACACGGG--T 55117

Qy      61 GGATGGCTGCAGCTTCATGGATAGAAATGTCCAGCTTGGGCTAGATACATCCAACATGGG 120
           | |||   ||||||      |||| ||    |  | ||| |||| ||  | ||| ||||
Db   55118 GAATGCTGGCAGCTGTGCCCATAGGAAAAGGCCACCTGGTCTAGGTATGTTCAAAATGGC 55177

Qy     121 GGCTCCACTCCTCTTTGT 138
           |||||||| |  | || |
Db   55178 GGCTCCACGCTCCCTTCT 55195
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Search completed: December 24, 2002, 17:17:35
Job time : 558.952 secs

GenCore version 5.1.3

OM nucleic - nucleic search, using sw model

Run on: December 24, 2002, 16:23:56 ; Search time 165.952 Seconds
(without alignments)
13583.723 Million cell updates/sec

Title: US-09-708-724A-3_COPY_10000_11000
Perfect score: 1001
Sequence: 1 caaaatttcagttaggaaga.....gcagcacataatgtatcatg 1001

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	82	8.2	119950	20	AAX90201	Human yes1 gene.
c	2	79	7.9	43069	21	AAZ36335	Genomic sequence o
c	3	77.2	7.7	368004	24	ABL57909	Human transporter
	4	76	7.6	302250	24	ABL67703	Oesophagus cancer
c	5	75.8	7.6	17000	24	AAL40299	Caspase 6 antisens
c	6	75.2	7.5	1167	22	AAS00839	Human cDNA clone H
c	7	75.2	7.5	1231	22	AAH33190	Human colon cancer
	8	73.2	7.3	199	21	AAC19473	Human secreted pro
	9	73.2	7.3	6312	22	ABA14390	Human nervous syst
	10	72.8	7.3	699	22	ABA07676	Human ovarian and
	11	72.8	7.3	699	22	AAL02590	Human reproductive
c	12	72.6	7.3	2079	22	AAK94192	Human full-length
	13	72.4	7.2	592	24	ABN60912	Human cancer relat
	14	72.4	7.2	14968	21	AAF21343	Human low adenosin
	15	72.4	7.2	14968	21	AAA35221	Human adenosine re
	16	72.4	7.2	14968	22	AAD14464	Human IL-15 gene a
	17	72.4	7.2	14968	22	AAD15838	Human interleukin
	18	72.4	7.2	17844	21	AAA35223	Human adenosine re
	19	72.4	7.2	17904	21	AAF21345	Human low adenosin
	20	72.2	7.2	343	21	AAC29850	Human secreted pro
c	21	71.4	7.1	894	22	AAK64791	Human immune/haema
	22	71.2	7.1	1885	22	AAH14899	Human cDNA sequenc
	23	71.2	7.1	3208	22	AAH14896	Human cDNA sequenc
	24	70.8	7.1	397	22	AAI89485	Human polynucleoti
c	25	70.8	7.1	465237	24	ABQ87681	Human oestrogen re
c	26	70.8	7.1	465237	24	ABA90193	Human oestrogen re
c	27	70.6	7.1	136284	24	ABK83575	Human cDNA differe
c	28	70.2	7.0	678	22	AAS46934	Human G protein-co
c	29	70.2	7.0	678	24	ABK81712	cDNA encoding nove
c	30	70.2	7.0	7687	22	AAL04658	Human reproductive
c	31	70.2	7.0	7687	23	ABL97565	Human testicular a
c	32	69.8	7.0	742	22	AAI95221	Human neuroblastom
c	33	69.4	6.9	560	24	ABL78544	Human ovarian canc
c	34	69.4	6.9	2934	22	ABA07330	Human pancreatic c
c	35	69.4	6.9	2934	22	AAK64817	Human immune/haema
c	36	69.4	6.9	2934	22	AAK90489	Human digestive sy
c	37	69.2	6.9	240825	22	AAF24497	Human PG-3 gene.
c	38	69	6.9	534	22	ABA07011	Human pancreatic c
c	39	69	6.9	534	22	AAK88496	Human digestive sy
c	40	69	6.9	3581	22	AAS39909	Genomic sequence #
c	41	69	6.9	3581	22	AAK72164	Human immune/haema
c	42	69	6.9	3581	22	AAK90353	Human digestive sy
	43	68.2	6.8	168575	22	AAH21613	Human hypocretin r
c	44	67.2	6.7	4582	22	AAK72026	Human immune/haema
c	45	67.2	6.7	8734	22	AAK72027	Human immune/haema

ALIGNMENTS

RESULT 1
AAX90201
ID AAX90201 standard; DNA; 119950 BP.
XX
AC AAX90201;
XX
DT 23-SEP-1999 (first entry)
XX
DE Human yes1 gene.
XX
KW Human; yes1; diagnosis; neuropsychiatric disorder; BAD; schizophrenia;
KW bipolar affective disorder; attention deficit disorder;
KW schizoaffective disorder; unipolar affective disorder;
KW Huntington's disease; Parkinson's disease; manic-depression; ds.
XX
OS Homo sapiens.
XX
PN WO9935290-A1.
XX
PD 15-JUL-1999.
XX
PF 07-JAN-1999; 99WO-US00297.
XX
PR 08-JAN-1998; 98US-0003944.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Chen H, Freimer NB;
XX
DR WPI; 1999-444203/37.
DR P-PSDB; AAY24421.
XX

```
PT   Detection of a genetic mutation in the yes1 gene, useful for
PT   diagnosis of a yes1 mediated neuropsychiatric disorder in a human
XX
PS   Claim 1; Fig 2; 110pp; English.
XX
CC   The present invention describes a method for detecting a genetic
CC   mutation in the yes1 gene for the diagnosis of a yes1 mediated
CC   neuropsychiatric disorder in a human. The method comprises detecting the
CC   presence or absence of a genetic mutation in the yes1 gene of the
CC   subject, where the genetic mutation is a substitution, insertion or a
CC   deletion and results in the production of a yes1 protein having an amino
CC   acid sequence other than the wild-type yes1 amino acid sequence and the
CC   presence of the genetic mutation identifies a subject that has or is at
CC   risk for developing a yes1 mediated neuropsychiatric disorder. Compounds
CC   that bind to the yes1 protein, alter the amount of the protein, or alter
CC   the activity of the yes1 gene product, are useful for treating a yes1
CC   mediated neuropsychiatric disorder. The disorders include Huntington's
CC   disease, Parkinson's disease, and especially bipolar-affected disorder
CC   (BAD) also known as bipolar mood disorder (BP) or manic-depressive
CC   illness. The method distinguishes neuropsychiatric disorders from
CC   neurological disorders, which enables more accurate evaluation and
CC   prescription of medical treatment. The present sequence represents the
CC   human yes1 cDNA sequence.
XX
SQ   Sequence 119950 BP; 34471 A; 23730 C; 24660 G; 37033 T; 56 other;

  Query Match             8.2%;  Score 82;  DB 20;  Length 119950;
  Best Local Similarity   65.1%;  Pred. No. 5.8e-11;
  Matches  138;  Conservative    0;  Mismatches   70;  Indels    4;  Gaps    1;

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Db   79787 AAAATTTAGATAGGAGGAGTAAGTTCAAGAGATCTATTGTAGAACACAGTTAATAACAAT 79846

Qy      63 GTATTGTGTTCTTGACTAATACAGTAGATTTCGAGTGTTCTCACAACAAAAACATGATGG 122
             |||||| |||||||  | |||     |  |     ||  || || || ||| ||||
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Qy     123 GTATGTGAGGTAATGCATATGCAAACTAGCTTGGGTTAACCATTCCACAATATGTGTGTA 182
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Qy     183 TTTCAAAACAGTACCATAAATGCAGACAATTT 214
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Db   79963 TTTCAAAGCATCATGTTGTATGCAATAAATAT 79994


RESULT 2
AAZ36335/c
ID   AAZ36335 standard; DNA; 43069 BP.
XX
AC   AAZ36335;
XX
DT   22-FEB-2000  (first entry)
XX
DE   Genomic sequence of the 5-lipoxygenase activating protein (FLAP).
XX
KW   Human; 5-lipoxygenase activating protein; FLAP; biallelic marker;
KW   leukotriene pathway; genotype; haplotype; FLAP-related biallelic marker;
KW   asthma; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
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FT                   /note= "specifically claimed in claim 1"
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FT                   /note= "potential 5' regulatory region"
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FT                   /note= "upstream amplification primer 10-517"
FT   allele          replace (3950, C)
FT                   /*tag= d
FT   primer_bind     3927..3973
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FT                   /note= "potential binding site for a probe"
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FT                   /*tag= f
FT                   /note= "downstream amplification primer 10-517"
FT   primer_bind     4120..4138
FT                   /*tag= g
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FT   primer_bind     4220..4266
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FT                   /note= "upstream amplification primer 10-500"
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FT                   /note= "specifically claimed in claim 1"
FT   primer_bind     16114..16132
FT                   /*tag= bh
FT                   /note= "upstream amplification primer 10-33"
FT   exon            16236..16335
FT                   /*tag= bi
FT                   /number= 2
FT   primer_bind     16265..16311
FT                   /*tag= bj
FT                   /note= "potential binding site for a probe"
FT   allele          replace (16288, T)
FT                   /*tag= bk
FT                   /note= "claim 4"
FT   primer_bind     16324..16370
FT                   /*tag= bl
FT                   /note= "potential binding site for a probe"
FT   intron          16336..24226
FT                   /*tag= bm
FT                   /number= 2
FT   allele          replace (16347, A)
FT                   /*tag= bn
FT   primer_bind     16360..16406

  Query Match             7.9%;  Score 79;  DB 21;  Length 43069;
  Best Local Similarity   64.6%;  Pred. No. 2.4e-10;
  Matches  135;  Conservative    0;  Mismatches   70;  Indels    4;  Gaps    1;

Qy     223 TTACAATCAAAAAAGTTTTAAAATGAGGACCTTAGGGTGGGTCCTAATCCAATCTAAGTG 282
           ||| |   | ||      ||||||||   | |  |||||| |||| ||||| | | | ||
Db   34050 TTAAAGAGATAATTAAGGTAAAATGAACTCATATGGGTGGATCCTCATCCAGTATGACTG 33991

Qy     283 ATGTCTCCATGAAAGAGGAAATAAGGATACAAATGTGCACACAGAGAGAAATGGCCACAT 342
             ||||      ||| ||| ||  ||| ||| |  ||| ||  |||     ||   |  |
Db   33990 GGGTCTTATAAGAAGGGGAGATTTGGACACAGACATGCTCAGTGAGG----TGATGATGT 33935

Qy     343 GAGGACACAATGAGAATGTGGCTACTTACAAGCCTAGGAGAGAGGCCTCCGAGAAAACAC 402
           || ||||||   |||| ||||    || ||||| ||||||||||  | |   ||||
Db   33934 GAAGACACAGGTAGAAGGTGGCACTCTATAAGCCAAGGAGAGAGGCTGCAGGAGAAACCG 33875

Qy     403 ACCCTACCCACACCTTGATGTTGGACTTC 431
           ||||| ||||||| ||||| |||||||||
Db   33874 ACCCTGCCCACACTTTGATCTTGGACTTC 33846


RESULT 3
ABL57909/c
ID   ABL57909 standard; DNA; 368004 BP.
XX
AC   ABL57909;
XX
DT   05-JUL-2002  (first entry)
XX
DE   Human transporter protein gene.
XX
KW   Human; transport protein; gene; gene therapy; glutamate receptor 4; SNP;
KW   brain; foetal brain; chromosome 11; single nucleotide polymorphism; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             2001..366005
FT                   /*tag= a
FT                   /product= "Human transporter protein"
FT   exon            2001..2088
FT                   /*tag= b
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FT                   /number= 1
FT   exon            3279..3437
FT                   /*tag= c
FT                   /number= 2
FT   exon            144533..144772
FT                   /*tag= d
FT                   /number= 3
FT   exon            253472..253656
FT                   /*tag= e
FT                   /number= 4
FT   exon            278947..279000
FT                   /*tag= f
FT                   /number= 5
FT   exon            289708..289866
FT                   /*tag= g
FT                   /number= 6
FT   exon            295254..295421
FT                   /*tag= h
FT                   /number= 7
FT   exon            296637..296741
FT                   /*tag= i
FT                   /number= 8
FT   exon            301876..301986
FT                   /*tag= j
FT                   /number= 9
FT   exon            310162..310368
FT                   /*tag= k
FT                   /number= 10
FT   exon            315851..316221
FT                   /*tag= l
FT                   /number= 11
FT   exon            318193..318391
FT                   /*tag= m
FT                   /number= 12
FT   exon            325176..325423
FT                   /*tag= n
FT                   /number= 13
FT   exon            357392..357532
FT                   /*tag= o
FT                   /number= 14
FT   exon            363364..363478
FT                   /*tag= p
FT                   /number= 15
FT   exon            365760..366002
FT                   /*tag= q
FT                   /number= 16
FT   variation       replace(577,C)
FT                   /*tag= r
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(1895,G)
FT                   /*tag= s
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(2765,A)
FT                   /*tag= t
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(10364,G)
FT                   /*tag= u
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(11079,G)
FT                   /*tag= v
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(11514,G)
FT                   /*tag= w
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(20503,G)
FT                   /*tag= x
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(20505,G)
FT                   /*tag= y
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(23307,A)
FT                   /*tag= z
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(27764,C)
FT                   /*tag= aa
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(27766,C)
FT                   /*tag= ab
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(28939,A)
FT                   /*tag= ac
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(29021,C)
FT                   /*tag= ad
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(29908,A)
FT                   /*tag= ae
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(30398,T)
FT                   /*tag= af
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(30440,T)
FT                   /*tag= ag
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(31718,G)
FT                   /*tag= ah
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(35206,C)
FT                   /*tag= ai
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(35304,A)
FT                   /*tag= aj
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(36362,A)
FT                   /*tag= ak
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(36436,A)
FT                   /*tag= al
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(43063,C)
FT                   /*tag= am
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(43202,C)
FT                   /*tag= an
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(44576,G)
FT                   /*tag= ao
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(44622,G)
FT                   /*tag= ap
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(45378,T)
FT                   /*tag= aq
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(45685,T)
FT                   /*tag= ar
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(45998,T)
FT                   /*tag= as
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(46173,C)
FT                   /*tag= at
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(47636,A)
FT                   /*tag= au
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(48011,G)
FT                   /*tag= av
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(48012,C)
FT                   /*tag= aw
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(48019,A)
FT                   /*tag= ax
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(50175,G)
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FT                   /*tag= ay
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(50919,T)
FT                   /*tag= az
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(51730,T)
FT                   /*tag= ba
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(53975,G)
FT                   /*tag= bb
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(54377,C)
FT                   /*tag= bc
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(54388,G)
FT                   /*tag= bd
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(61997,G)
FT                   /*tag= be
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(62272,C)
FT                   /*tag= bf
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(63212,G)
FT                   /*tag= bg
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(65792,C)
FT                   /*tag= bh
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(68883,C)
FT                   /*tag= bi
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(69135,G)
FT                   /*tag= bj
FT                   /standard_name= "Single nucleotide polymorphism"

  Query Match             7.7%;  Score 77.2;  DB 24;  Length 368004;
  Best Local Similarity   68.5%;  Pred. No. 1.7e-09;
  Matches  137;  Conservative    0;  Mismatches   58;  Indels    5;  Gaps    2;

Qy     231 AAAAAAGTTTTAAAATGAGGACCTTAGGGTGGGTCCTAATCCAATCTAAGTGATGTCTCC 290
           | ||  |  |||||||||||| | |||||||||| |||||| |||| | | || |||   |
Db   33099 AGAATCGAGTTAAAATGAGGTCATTAGGGTGGGCCCTAATGCAATATGACTGGTGTTCTC 33040

Qy     291 ATGAAAGAGGAAATAAGGATACAAATGTGCACACAGAGAGAAATGGCCACATGAGGACAC 350
           || |||   | ||| |||| ||| |    ||  |||||||  | | ||| || | |||||
Db   33039 ATAAAAAGAGGAATTAGGACACAGA----CATGCAGAGAGGGAAGACCATATTAAGACAC 32984

Qy     351 AATGAGAATGTGGCTACTTACAAGCCTAGGAGAGAGGCCTCCGAGAAAACACACCCTACC 410
           |  ||||   |||| |  |||||||| |||||| ||||||| ||  ||||   |  | |
Db   32983 AGGGAGATAATGGC-ATCTACAAGCCAAGGAGAAAGGCCTCAGAAGAAACCACCTTTGCT 32925

Qy     411 CACACCTTGATGTTGGACTT 430
             | ||||||| |  |||||
Db   32924 GCCTCCTTGATCTCAGACTT 32905


RESULT 4
ABL67703
ID   ABL67703 standard; DNA; 302250 BP.
XX
AC   ABL67703;
XX
DT   15-MAY-2002  (first entry)
XX
DE   Oesophagus cancer related gene sequence SEQ ID NO:6040.
XX
KW   Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW   stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW   cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW   gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200194629-A2.
XX
PD   13-DEC-2001.
XX
PF   30-MAY-2001; 2001WO-US10838.
XX
PR   05-JUN-2000; 2000US-209473P.
PR   05-JUN-2000; 2000US-209531P.
PR   18-SEP-2000; 2000US-233133P.
PR   18-SEP-2000; 2000US-233617P.
PR   20-SEP-2000; 2000US-234009P.
PR   20-SEP-2000; 2000US-234034P.
PR   20-SEP-2000; 2000US-234052P.
PR   22-SEP-2000; 2000US-234509P.
PR   22-SEP-2000; 2000US-234567P.
PR   25-SEP-2000; 2000US-234923P.
PR   25-SEP-2000; 2000US-234924P.
PR   25-SEP-2000; 2000US-235077P.
PR   25-SEP-2000; 2000US-235082P.
PR   25-SEP-2000; 2000US-235134P.
PR   25-SEP-2000; 2000US-235280P.
PR   26-SEP-2000; 2000US-235637P.
PR   26-SEP-2000; 2000US-235638P.
PR   27-SEP-2000; 2000US-235711P.
PR   27-SEP-2000; 2000US-235720P.
PR   27-SEP-2000; 2000US-235840P.
PR   27-SEP-2000; 2000US-235863P.
PR   28-SEP-2000; 2000US-236028P.
PR   28-SEP-2000; 2000US-236032P.
PR   28-SEP-2000; 2000US-236033P.
PR   28-SEP-2000; 2000US-236034P.
PR   28-SEP-2000; 2000US-236109P.
PR   28-SEP-2000; 2000US-236111P.
PR   29-SEP-2000; 2000US-236842P.
PR   29-SEP-2000; 2000US-236891P.
PR   02-OCT-2000; 2000US-237172P.
PR   02-OCT-2000; 2000US-237173P.
PR   02-OCT-2000; 2000US-237278P.
PR   02-OCT-2000; 2000US-237294P.
PR   02-OCT-2000; 2000US-237295P.
PR   02-OCT-2000; 2000US-237316P.
PR   03-OCT-2000; 2000US-237425P.
PR   03-OCT-2000; 2000US-237598P.
PR   03-OCT-2000; 2000US-237604P.
PR   03-OCT-2000; 2000US-237606P.
PR   03-OCT-2000; 2000US-237608P.
PR   01-NOV-2000; 2000US-244867P.
PR   01-NOV-2000; 2000US-245084P.
XX
PA   (AVAL-) AVALON PHARM.
XX
PI   Young PE,  Augustus M,  Carter KC,  Ebner R,  Endress G,  Horrigan S;
PI   Soppet DR,  Weaver Z;
XX
DR   WPI; 2002-188264/24.
XX
PT   Screening for anti-neoplastic agent involves exposing cells to a
PT   chemical agent to be tested for anti-neoplastic activity, and
PT   determining a change in expression of a gene of a signature gene set  -
XX
PS   Claim 1; SEQ ID 6040; 44pp; English.
XX
CC   The present invention describes a method (M1) for screening for an
CC   anti-neoplastic agent. The method involves exposing cells to a chemical
CC   agent to be tested for anti-neoplastic activity, determining a change in
CC   expression of at least one gene (I) of a signature gene set, where (I)
CC   comprises a sequence (S) selected from 8447 sequences (given in ABL61664
CC   to ABL70110), or is at least 95% identical to (S), where a change in
CC   expression is indicative of anti-neoplastic activity. (I) has cytostatic
CC   activity and can be used in gene therapy. M1 can be used for screening
CC   an anti-neoplastic agent, and can be used for producing a product which
CC   is the data collected with respect to the anti-neoplastic agent as a
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CC   result of M1, and the data is sufficient to convey the chemical
CC   structure and/or properties of the agent. M1 can be used in the
CC   treatment of cancer such as colon, breast, stomach, lung, thyroid,
CC   oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC   adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
CC   infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
CC   carcinoma, papillary carcinoma and Wilm's tumour.
XX
SQ   Sequence 302250 BP; 76116 A; 72066 C; 71554 G; 82514 T; 0 other;

  Query Match             7.6%;  Score 76;  DB 24;  Length 302250;
  Best Local Similarity   65.6%;  Pred. No. 3.3e-09;
  Matches  143;  Conservative    0;  Mismatches   70;  Indels    5;  Gaps    2;

Qy    215 TGTGTCAGTTACAATCAAAAAAGTTTTAAAATGAGGACCTTAGGGTGGGTCCTAATCCAA 274
          || | |  ||| |     ||       || ||||||| | |||||||||  ||| ||||||
Db 113304 TGGGGCCTTTAAATAGGTAATTAAGATAGAATGAGGCCGTTAGGGTGGTCCCTGATCCAA 113363

Qy    275 TCTAAGTGATGT-CTCCATGAAAGAGGAAATAAGGATACAAATGTGCACACAGAGAGAAA 333
          | | | || ||| |    | ||| |||| ||   || ||| |  ||  || || |||||
Db 113364 TATGACTGGTGTCCATGTTAAAAAAGGAGATTCAGACACAGACTTGTGCAGAGGGAGAA- 113422

Qy    334 TGGCCACATGAGGACACAATGAGAATGTGGCTACTTACAAGCCTAGGAGAGAGGCCTCCG 393
             |||  || |||| ||  |||||   ||| |  |||||||| |||| ||||||||| |
Db 113423 ---CCATGTGCGGACGCAGGGAGAAGTGGGCCATCTACAAGCCAAGGACAGAGGCCTCAG 113479

Qy    394 AGAAAACACACCCTACCCACACCTTGATGTTGGACTTC 431
          |   |||  ||||| ||||||||||| | |   |||||
Db 113480 AATGAACCAACCCTGCCCACACCTTGGTCTCCAACTTC 113517


RESULT 5
AAL40299/c
ID   AAL40299 standard; DNA; 17000 BP.
XX
AC   AAL40299;
XX
DT   19-SEP-2002  (first entry)
XX
DE   Caspase 6 antisense inhibition related nucleic acid SEQ ID No 18.
XX
KW   Muscular; cytostatic; nootropic; neuroprotective; ophthalmological;
KW   antilipaemic; osteopathic; caspase 6; Rieger's syndrome; bone metabolism;
KW   ataxia telangiectasia; hyperproliferative disorder; cholesterol disorder;
KW   haematopoietic disorder; cancer; neurological; Alzheimer's disease;
KW   apoptotic; human; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200229066-A1.
XX
PD   11-APR-2002.
XX
PF   03-OCT-2001; 2001WO-US30871.
XX
PR   04-OCT-2000; 2000US-0679299.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Brown-driver VL,  Zhang H,  Watt AT;
XX
DR   WPI; 2002-471315/50.
XX
PT   An antisense oligonucleotide of 8 to 50 nucleotides in length that
PT   inhibits caspase 6, is useful for treating Rieger's syndrome -
XX
PS   Example 15; Page 104-112; 141pp; English.
XX
CC   The invention relates to an antisense oligonucleotide compound of 8 to 50
CC   nucleotides in length that is targeted to a nucleic acid molecule
CC   encoding caspase 6, where the oligonucleotide specifically hybridises
CC   with and inhibits the expression of caspase 6. The oligonucleotide of the
CC   invention specifically hybridises to and inhibits expression of caspase 6
CC   in cells or tissues. The oligonucleotides can be administered
CC   therapeutically or prophylactically to treat an animal having a disease
CC   or condition associated with caspase 6, such as Rieger's syndrome or
CC   ataxia telangiectasia, hyperproliferative disorder, a haematopoietic
CC   disorder, a bone metabolism or cholesterol disorder, various types of
CC   cancer, neurological conditions such as Alzheimer's disease and other de-
CC   regulated apoptotic pathological conditions. This polynucleotide sequence
CC   represents a human caspase 6 nucleic acid relating to the invention.
XX
SQ   Sequence 17000 BP; 4758 A; 3480 C; 3987 G; 4775 T; 0 other;

  Query Match             7.6%;  Score 75.8;  DB 24;  Length 17000;
  Best Local Similarity   68.3%;  Pred. No. 1.2e-09;
  Matches  136;  Conservative    0;  Mismatches   57;  Indels    6;  Gaps    2;

Qy    242 AAAATGAGGACCTTAGGGTGGGTCCTAATCCAATCTAAGTGATGTCTCCATGAAAGAGGA 301
          |||||||||  | |  |||||   || |||||||  | | |  ||||| |||  |||| ||
Db  12724 AAAATGAGGTCATACGGGTGAAACCAAATCCAACATGACTAGTGTCTTCAT--AAGAAGA 12667

Qy    302 AATAAGGATACAAATGTGCACACAGAGAGAAATGGCCACATGAGGACACAATGAGAATGT 361
          |||  ||| ||| |  |||||    |||  || | ||| |||| | ||||  || ||  |
Db  12666 AATTGGGACACAGACATGCAC----AGAAGAAAGACCATATGAAGGCACAGGGACAAGAT 12611

Qy    362 GGCTACTTACAAGCCTAGGAGAGAGGCCTCCGAGAAAACACACCCTACCCACACCTTGAT 421
          ||| || |||||||| |  || |||||||| ||  ||||  | ||| ||||||| || ||
Db  12610 GGCCACCTACAAGCCAAAAAGGGAGGCCTCAGAAGAAACCAATCCTCCCCACACGTTCAT 12551

Qy    422 GTTGGACTTCATCCTGTAG 440
            |  ||||||   ||  ||
Db  12550 CTGAGACTTCCAGCTCCAG 12532


RESULT 6
AAS00839/c
ID   AAS00839 standard; cDNA; 1167 BP.
XX
AC   AAS00839;
XX
DT   04-JUL-2001  (first entry)
XX
DE   Human cDNA clone HWLEH32 encoding cancer related protein 13.
XX
KW   Human; cancer related protein; HWLEH32; food additive;
KW   preservative; immunogen; antibody; bone cancer; adrenal cancer;
KW   bone marrow cancer; breast cancer; gastrointestinal cancer;
KW   liver cancer; lung cancer; urogenital cancer; immune disorder;
KW   Addison's disease; allergy; autoimmune haemolytic anaemia;
KW   autoimmune thyroiditis; diabetes mellitus; Crohn's disease;
KW   multiple sclerosis; rheumatoid arthritis; ulcerative colitis;
KW   acquired immunodeficiency syndrome; AIDS; cardiovascular disorder;
KW   myocardial ischaemia; wound healing; neurological disorder;
KW   Parkinson's disease; Alzheimer's disease; cerebral anoxia; epilepsy;
KW   viral infection; bacterial infection; fungal infection;
KW   parasitic infection; agonist; antagonist; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             592..741
FT                   /*tag=  a
FT                   /product= "Cancer related protein 13"
FT   sig_peptide     592..633
FT                   /*tag=  b
FT   mat_peptide     634..738
FT                   /*tag=  c
FT                   /label= Mature_Cancer_related_protein_13
XX
PN   WO200118014-A1.
XX
PD   15-MAR-2001.
XX
PF   30-AUG-2000; 2000WO-US23794.
XX
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PR 03-SEP-1999; 99US-0152296.
PR 06-OCT-1999; 99US-0158003.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Roschke V;
XX
DR WPI; 2001-235186/24.
DR P-PSDB; AAU00878.
XX
PT Twenty nine nucleic acid molecules encoding human cancer associated
PT proteins, useful in the prevention, treatment and diagnosis of cancer,
PT immune disorders, cardiovascular disorders and neurological diseases -
XX
PS Disclosure; Page 376; 427pp; English.
XX
CC The sequence encodes a novel Human cancer related protein. The
CC polynucleotides and polypeptides are useful for preventing,
CC treating or ameliorating a medical condition in e.g. humans,
CC mice, rabbits, goats, horses, cats, dogs, chickens or sheep. The
CC polypeptides can also be used as a food additive or preservative to
CC increase or decrease storage capabilities. The polynucleotide are
CC useful for chromosome identification. The nucleic acids, protein,
CC antibodies, agonists and antagonists are useful in the diagnosis,
CC treatment and prevention of cancer (e.g. cancers of the adrenal gland,
CC bone, bone marrow, breast, gastrointestinal tract, liver, lung, or
CC urogenital), immune disorders (e.g. Addison's disease, allergies,
CC autoimmune haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus,
CC Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC colitis, acquired immunodeficiency syndrome, AIDS), cardiovascular
CC disorders such as myocardial ischaemias, wound healing, neurological
CC diseases (e.g. Parkinson's disease, Alzheimer's disease, cerebral anoxia
CC and epilepsy) and infectious diseases such as viral, bacterial, fungal
CC and parasitic infections. Numerous examples of each type of disorder are
CC given in the specification.
XX
SQ Sequence 1167 BP; 357 A; 204 C; 186 G; 420 T; 0 other;

Query Match 7.5%; Score 75.2; DB 22; Length 1167;
Best Local Similarity 65.5%; Pred. No. 5.8e-10;
Matches 110; Conservative 0; Mismatches 58; Indels 0; Gaps 0;

Qy 78 CTAATACAGTAGATTTCGAGTGTTCTCACAACAAAAACATGATGGGTATGTGAGGTAATG 137
Db 567 CTAACAGAGTAGATTTTAAATGTTCTCACCACAAATAAATGATAAGTATAGGAGGTAATG 508

Qy 138 CATATGCAAACTAGCTTGGGTTAACCATTCCACAATATGTGTGTATTTCAAAACAGTACC 197
Db 507 CATATGTTAACTAGCTTGATTTAGTCATTCTACAACATATACATATATCAAAACATCATG 448

Qy 198 ATAAATGCAGACAATTTTGTGTCAGTTACAATCAAAAAAGTTTTAAAA 245
Db 447 TTGTACAACAATAAGTATACACAATTATTTTTCAATTAAAAATAAATA 400

RESULT 7
AAH33190/c
ID AAH33190 standard; cDNA; 1231 BP.
XX
AC AAH33190;
XX
DT 03-SEP-2001 (first entry)
XX
DE Human colon cancer antigen encoding cDNA SEQ ID NO:246.
XX
KW Human; colon cancer; colon cancer antigen; diagnosis; detection;
KW colorectal carcinoma; ss.
XX
OS Homo sapiens.
XX
PN WO200122920-A2.
XX
PD 05-APR-2001.
XX
PF 28-SEP-2000; 2000WO-US26524.
XX
PR 29-SEP-1999; 99US-0157137.
PR 03-NOV-1999; 99US-0163280.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Ruben SM, Barash SC, Birse CE, Rosen CA;
XX
DR WPI; 2001-235357/24.
DR P-PSDB; AAG73759.
XX
PT Nucleic acids encoding 4277 human colon cancer-associated polypeptides,
PT useful for preventing, diagnosing and/or treating colorectal cancers -
XX
PS Claim 1; Page 2381-2382; 9803pp; English.
XX
CC AAH32943 to AAH37195 and AAG73514 to AAG77788 represent human colon
CC cancer-associated nucleic acid molecules (N) and proteins (P), where
CC the proteins are collectively known as colon cancer antigens. The colon
CC cancer antigens have cytostatic activity and can be used in gene
CC therapy and vaccine production. N and P may be used in the prevention,
CC diagnosis and treatment of diseases associated with inappropriate P
CC expression. For example, N and P may be used to treat disorders
CC associated with decreased expression by rectifying mutations or deletions
CC in a patient's genome that affect the activity of P by expressing
CC inactive proteins or to supplement the patients own production of P.
CC Additionally, N may be used to produce the colon cancer-associated Ps,
CC by inserting the nucleic acids into a host cell and culturing the cell
CC to express the proteins. N and P can be used in the prevention, diagnosis
CC and treatment of colorectal carcinomas and cancers. AAH37196 to AAH37204
CC and AAB77789 represent sequences used in the exemplification of the
CC present invention.
CC N.B. Pages 666 to 682 and page 7053 of the sequence listing were
CC missing at time of publication, meaning no sequences are present for
CC SEQ ID NO:1027 to 1052, 7921 and 7922.
XX
SQ Sequence 1231 BP; 369 A; 219 C; 206 G; 432 T; 5 other;

Query Match 7.5%; Score 75.2; DB 22; Length 1231;
Best Local Similarity 65.5%; Pred. No. 6e-10;
Matches 110; Conservative 0; Mismatches 58; Indels 0; Gaps 0;

Qy 78 CTAATACAGTAGATTTCGAGTGTTCTCACAACAAAAACATGATGGGTATGTGAGGTAATG 137
Db 567 CTAACAGAGTAGATTTTAAATGTTCTCACCACAAATAAATGATAAGTATAGGAGGTAATG 508

Qy 138 CATATGCAAACTAGCTTGGGTTAACCATTCCACAATATGTGTGTATTTCAAAACAGTACC 197
Db 507 CATATGTTAACTAGCTTGATTTAGTCATTCTACAACATATACATATATCAAAACATCATG 448

Qy 198 ATAAATGCAGACAATTTTGTGTCAGTTACAATCAAAAAAGTTTTAAAA 245
Db 447 TTGTACAACAATAAGTATACACAATTATTTTTCAATTAAAAATAAATA 400

RESULT 8
AAC19473
ID AAC19473 standard; cDNA; 199 BP.
XX
AC AAC19473;
XX
DT 06-OCT-2000 (first entry)
XX
DE Human secreted protein 5' EST, SEQ ID NO: 23548.
XX
KW Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW gene therapy; chromosome mapping; ss.
XX
OS Homo sapiens.
XX
PN EP1033401-A2.

```
XX
PD   06-SEP-2000.
XX
PF   21-FEB-2000; 2000EP-0200610.
XX
PR   26-FEB-1999;   99US-0122487.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J,  Duclert A,  Giordano J;
XX
DR   WPI; 2000-500381/45.
XX
PT   New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT   obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT   diagnostic, forensic, gene therapy and chromosome mapping procedures -
XX
PS   Claim 1; SEQ ID 23548; 71pp + CD-ROM; English.
XX
CC   The present sequence is one of a large number of 5' ESTs derived from
CC   mRNAs encoding secreted proteins. No ORF has yet been conclusively
CC   identified within the present sequence. The 5' ESTs were prepared from
CC   total human RNAs or polyA+ RNAs derived from 30 different tissues. EST
CC   sequences usually correspond mainly to the 3' untranslated region (UTR)
CC   of the mRNA because they are often obtained from oligo-dT primed cDNA
CC   libraries. Such ESTs are not well suited for isolating cDNA sequences
CC   derived from the 5' ends of mRNAs and even in those cases where longer
CC   cDNA sequences have been obtained, the full 5' UTR is rarely included.
CC   5' ESTs are derived from mRNAs with intact 5' ends and can therefore be
CC   used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used
CC   in diagnostic, forensic, gene therapy and chromosome mapping procedures.
CC   They are used to obtain upstream regulatory sequences and to design
CC   expression and secretion vectors.
XX
SQ   Sequence 199 BP; 74 A; 34 C; 53 G; 38 T; 0 other;

  Query Match             7.3%;  Score 73.2;  DB 21;  Length 199;
  Best Local Similarity   65.1%;  Pred. No. 9.8e-10;
  Matches  108;  Conservative    0;  Mismatches   58;  Indels    0;  Gaps    0;

Qy     241 TAAAATGAGGACCTTAGGGTGGGTCCTAATCCAATCTAAGTGATGTCTCCATGAAAGAGG 300
           ||||||||||  ||  || |||| |||||||||||| | | || ||||       | ||||
Db      30 TAAAATGAGGTTCTATGGATGGGCCCTAATCCAATATGACTGGTGTCCTATAAGAGGAGG 89

Qy     301 AAATAAGGATACAAATGTGCACACAGAGAGAAATGGCCACATGAGGACACAATGAGAATG 360
           |||| |||| ||| |       |          |  || |  || ||||| |   ||||||
Db      90 AAATTAGGACACAGACAACACAAAGACTGAGGACAGCTATGTGGGGACAGAGCAAGAATG 149

Qy     361 TGGCTACTTACAAGCCTAGGAGAGAGGCCTCCGAGAAAACACACCC 406
           |||| | || ||| || ||||||||||||||| ||  ||||  | ||
Db     150 TGGCCATTTGCAAACCAAGGAGAGAGGCCTCTGAAGAAACCAAACC 195


RESULT 9
ABA14390
ID   ABA14390 standard; DNA; 6312 BP.
XX
AC   ABA14390;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Human nervous system related polynucleotide SEQ ID NO 6721.
XX
KW   Human; nootropic; neuroprotective; cytostatic; dermatological; virucide;
KW   immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary;
KW   antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer;
KW   antirheumatic; hepatotropic; cerebroprotective; antiinflammatory;
KW   antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal;
KW   antiparasitic; cardiant; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; nephrotropic; gene therapy; vaccine; ds.
XX
OS   Homo sapiens.
XX
PN   WO200159063-A2.
XX
PD   16-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01334.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
PR   19-MAY-2000; 2000US-0205515.
PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
PR   30-JUN-2000; 2000US-0215135.
PR   07-JUL-2000; 2000US-0216647.
PR   07-JUL-2000; 2000US-0216880.
PR   11-JUL-2000; 2000US-0217487.
PR   11-JUL-2000; 2000US-0217496.
PR   14-JUL-2000; 2000US-0218290.
PR   26-JUL-2000; 2000US-0220963.
PR   26-JUL-2000; 2000US-0220964.
PR   14-AUG-2000; 2000US-0224518.
PR   14-AUG-2000; 2000US-0224519.
PR   14-AUG-2000; 2000US-0225213.
PR   14-AUG-2000; 2000US-0225214.
PR   14-AUG-2000; 2000US-0225266.
PR   14-AUG-2000; 2000US-0225267.
PR   14-AUG-2000; 2000US-0225268.
PR   14-AUG-2000; 2000US-0225270.
PR   14-AUG-2000; 2000US-0225447.
PR   14-AUG-2000; 2000US-0225757.
PR   14-AUG-2000; 2000US-0225758.
PR   14-AUG-2000; 2000US-0225759.
PR   18-AUG-2000; 2000US-0226279.
PR   22-AUG-2000; 2000US-0226681.
PR   22-AUG-2000; 2000US-0226868.
PR   22-AUG-2000; 2000US-0227182.
PR   23-AUG-2000; 2000US-0227009.
PR   30-AUG-2000; 2000US-0228924.
PR   01-SEP-2000; 2000US-0229287.
PR   01-SEP-2000; 2000US-0229343.
PR   01-SEP-2000; 2000US-0229344.
PR   01-SEP-2000; 2000US-0229345.
PR   05-SEP-2000; 2000US-0229509.
PR   05-SEP-2000; 2000US-0229513.
PR   06-SEP-2000; 2000US-0230437.
PR   06-SEP-2000; 2000US-0230438.
PR   08-SEP-2000; 2000US-0231242.
PR   08-SEP-2000; 2000US-0231243.
PR   08-SEP-2000; 2000US-0231244.
PR   08-SEP-2000; 2000US-0231413.
PR   08-SEP-2000; 2000US-0231414.
PR   08-SEP-2000; 2000US-0232080.
PR   08-SEP-2000; 2000US-0232081.
PR   12-SEP-2000; 2000US-0231968.
PR   14-SEP-2000; 2000US-0232397.
PR   14-SEP-2000; 2000US-0232398.
PR   14-SEP-2000; 2000US-0232399.
PR   14-SEP-2000; 2000US-0232400.
PR   14-SEP-2000; 2000US-0232401.
PR   14-SEP-2000; 2000US-0233063.
PR   14-SEP-2000; 2000US-0233064.
PR   14-SEP-2000; 2000US-0233065.
PR   21-SEP-2000; 2000US-0234223.
PR   21-SEP-2000; 2000US-0234274.
PR   25-SEP-2000; 2000US-0234997.
PR   25-SEP-2000; 2000US-0234998.
PR   26-SEP-2000; 2000US-0235484.
PR   27-SEP-2000; 2000US-0235834.
PR   27-SEP-2000; 2000US-0235836.
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PR 29-SEP-2000; 2000US-0236327.
PR 29-SEP-2000; 2000US-0236367.
PR 29-SEP-2000; 2000US-0236368.
PR 29-SEP-2000; 2000US-0236369.
PR 29-SEP-2000; 2000US-0236370.
PR 02-OCT-2000; 2000US-0236802.
PR 02-OCT-2000; 2000US-0237037.
PR 02-OCT-2000; 2000US-0237038.
PR 02-OCT-2000; 2000US-0237039.
PR 02-OCT-2000; 2000US-0237040.
PR 13-OCT-2000; 2000US-0239935.
PR 13-OCT-2000; 2000US-0239937.
PR 20-OCT-2000; 2000US-0240960.
PR 20-OCT-2000; 2000US-0241785.
PR 20-OCT-2000; 2000US-0241786.
PR 20-OCT-2000; 2000US-0241787.
PR 20-OCT-2000; 2000US-0241808.
PR 20-OCT-2000; 2000US-0241809.
PR 20-OCT-2000; 2000US-0241826.
PR 20-OCT-2000; 2000US-0242221.
PR 01-NOV-2000; 2000US-0244617.
PR 08-NOV-2000; 2000US-0246474.
PR 08-NOV-2000; 2000US-0246475.
PR 08-NOV-2000; 2000US-0246476.
PR 08-NOV-2000; 2000US-0246477.
PR 08-NOV-2000; 2000US-0246478.
PR 08-NOV-2000; 2000US-0246523.
PR 08-NOV-2000; 2000US-0246524.
PR 08-NOV-2000; 2000US-0246525.
PR 08-NOV-2000; 2000US-0246526.
PR 08-NOV-2000; 2000US-0246527.
PR 08-NOV-2000; 2000US-0246528.
PR 08-NOV-2000; 2000US-0246532.
PR 08-NOV-2000; 2000US-0246609.
PR 08-NOV-2000; 2000US-0246610.
PR 08-NOV-2000; 2000US-0246611.
PR 08-NOV-2000; 2000US-0246613.
PR 17-NOV-2000; 2000US-0249207.
PR 17-NOV-2000; 2000US-0249208.
PR 17-NOV-2000; 2000US-0249209.
PR 17-NOV-2000; 2000US-0249210.
PR 17-NOV-2000; 2000US-0249211.
PR 17-NOV-2000; 2000US-0249212.
PR 17-NOV-2000; 2000US-0249213.
PR 17-NOV-2000; 2000US-0249214.
PR 17-NOV-2000; 2000US-0249215.
PR 17-NOV-2000; 2000US-0249216.
PR 17-NOV-2000; 2000US-0249217.
PR 17-NOV-2000; 2000US-0249218.
PR 17-NOV-2000; 2000US-0249244.
PR 17-NOV-2000; 2000US-0249245.
PR 17-NOV-2000; 2000US-0249264.
PR 17-NOV-2000; 2000US-0249265.
PR 17-NOV-2000; 2000US-0249297.
PR 17-NOV-2000; 2000US-0249299.
PR 17-NOV-2000; 2000US-0249300.
PR 01-DEC-2000; 2000US-0250391.
PR 01-DEC-2000; 2000US-0251160.
PR 05-DEC-2000; 2000US-0251030.
PR 05-DEC-2000; 2000US-0251988.
PR 05-DEC-2000; 2000US-0256719.
PR 06-DEC-2000; 2000US-0251479.
PR 08-DEC-2000; 2000US-0251856.
PR 08-DEC-2000; 2000US-0251868.
PR 08-DEC-2000; 2000US-0251869.
PR 08-DEC-2000; 2000US-0251989.
PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-541565/60.
XX
PT Nucleic acids encoding 3224 human nervous system antigen polypeptides,
PT useful for preventing, diagnosing and/or treating nervous system
PT cancers and metastases
XX
PS Disclosure; SEQ ID NO 6721; 1701pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (ABA11004-ABA21534) and proteins
CC (ABB14678-ABB18001) useful for preventing, treating or ameliorating
CC medical conditions e.g. by protein or gene therapy. The genes are
CC isolated from a range of human tissues disclosed in the specification.
CC The nucleic acids, proteins, antibodies and (ant)agonists are useful
CC in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC and ovarian cancer and other cancers of the adrenal gland, bone, bone
CC marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC colitis; (c) cardiovascular disorders such as myocardial ischaemias;
CC (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC and parasitic infections.
CC Note: The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 6312 BP; 1750 A; 1411 C; 1347 G; 1804 T; 0 other;

Query Match 7.3%; Score 73.2; DB 22; Length 6312;
Best Local Similarity 65.4%; Pred. No. 3.9e-09;
Matches 140; Conservative 0; Mismatches 68; Indels 6; Gaps 2;

Qy 218 GTCAGTTACAATCAAAAAAGTTTTAAAATGAGGACCTTAGGGTGGGTCCTAATCCAATCT 277
Db 6061 GGCCTTTAAAGAGGTAATTAATTTATAACGGGGTTGTTAGGGTGAACCCTAATCCAATAT 6120

Qy 278 AAGTGATGTCTCCATGAAAGAGGAAATAAGGATACAAATGTGCACACAGAGAGAAATGGC 337
Db 6121 GATTG--GTATCCTTGTAGGAAGAGATTAGGACACAAA----CAACAGACAGAAGGTGAC 6174

Qy 338 CACATGAGGACACAATGAGAATGTGGCTACTTACAAGCCTAGGAGAGAGGCCTCCGAGAA 397
Db 6175 CACAGGAGGACACAGTGAGAAGCTGGCCATCTGCAAGCCAAGGAGAGAGACCTCAGGAGA 6234

Qy 398 AACACACCCTACCCACACCTTGATGTTGGACTTC 431
Db 6235 AACCAAACCTGCCAGCACCTTAATCTTAGACTTC 6268

RESULT 10
ABA07676
ID ABA07676 standard; cDNA; 699 BP.
XX
AC ABA07676;
XX
DT 11-JAN-2002 (first entry)
XX
DE Human ovarian and breast cancer associated polynucleotide SEQ ID NO 233.
XX
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW neurological disease; infection; human; secreted protein; ss.
XX
OS Homo sapiens.
XX
PN WO200155325-A2.
XX
PD 02-AUG-2001.
XX

PF 17-JAN-2001; 2001WO-US01345.
XX
PR 31-JAN-2000; 2000US-0179065.
PR 04-FEB-2000; 2000US-0180628.
PR 24-FEB-2000; 2000US-0184664.
PR 02-MAR-2000; 2000US-0186350.
PR 16-MAR-2000; 2000US-0189874.
PR 17-MAR-2000; 2000US-0190076.
PR 18-APR-2000; 2000US-0198123.
PR 19-MAY-2000; 2000US-0205515.
PR 07-JUN-2000; 2000US-0209467.
PR 28-JUN-2000; 2000US-0214886.
PR 30-JUN-2000; 2000US-0215135.
PR 07-JUL-2000; 2000US-0216647.
PR 07-JUL-2000; 2000US-0216880.
PR 11-JUL-2000; 2000US-0217487.
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PR 26-JUL-2000; 2000US-0220963.
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PR 14-AUG-2000; 2000US-0225213.
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PR 18-AUG-2000; 2000US-0226279.
PR 22-AUG-2000; 2000US-0226681.
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PR 22-AUG-2000; 2000US-0227182.
PR 23-AUG-2000; 2000US-0227009.
PR 30-AUG-2000; 2000US-0228924.
PR 01-SEP-2000; 2000US-0229287.
PR 01-SEP-2000; 2000US-0229343.
PR 01-SEP-2000; 2000US-0229344.
PR 01-SEP-2000; 2000US-0229345.
PR 05-SEP-2000; 2000US-0229509.
PR 05-SEP-2000; 2000US-0229513.
PR 06-SEP-2000; 2000US-0230437.
PR 06-SEP-2000; 2000US-0230438.
PR 08-SEP-2000; 2000US-0231242.
PR 08-SEP-2000; 2000US-0231243.
PR 08-SEP-2000; 2000US-0231244.
PR 08-SEP-2000; 2000US-0231413.
PR 08-SEP-2000; 2000US-0231414.
PR 08-SEP-2000; 2000US-0232080.
PR 08-SEP-2000; 2000US-0232081.
PR 12-SEP-2000; 2000US-0231968.
PR 14-SEP-2000; 2000US-0232397.
PR 14-SEP-2000; 2000US-0232398.
PR 14-SEP-2000; 2000US-0232399.
PR 14-SEP-2000; 2000US-0232400.
PR 14-SEP-2000; 2000US-0232401.
PR 14-SEP-2000; 2000US-0233063.
PR 14-SEP-2000; 2000US-0233064.
PR 14-SEP-2000; 2000US-0233065.
PR 21-SEP-2000; 2000US-0234223.
PR 21-SEP-2000; 2000US-0234274.
PR 25-SEP-2000; 2000US-0234997.
PR 25-SEP-2000; 2000US-0234998.
PR 26-SEP-2000; 2000US-0235484.
PR 27-SEP-2000; 2000US-0235834.
PR 27-SEP-2000; 2000US-0235836.
PR 29-SEP-2000; 2000US-0236327.
PR 29-SEP-2000; 2000US-0236367.
PR 29-SEP-2000; 2000US-0236368.
PR 29-SEP-2000; 2000US-0236369.
PR 29-SEP-2000; 2000US-0236370.
PR 02-OCT-2000; 2000US-0236802.
PR 02-OCT-2000; 2000US-0237037.
PR 02-OCT-2000; 2000US-0237038.
PR 02-OCT-2000; 2000US-0237039.
PR 02-OCT-2000; 2000US-0237040.
PR 13-OCT-2000; 2000US-0239935.
PR 13-OCT-2000; 2000US-0239937.
PR 20-OCT-2000; 2000US-0240960.
PR 20-OCT-2000; 2000US-0241221.
PR 20-OCT-2000; 2000US-0241785.
PR 20-OCT-2000; 2000US-0241786.
PR 20-OCT-2000; 2000US-0241787.
PR 20-OCT-2000; 2000US-0241808.
PR 20-OCT-2000; 2000US-0241809.
PR 20-OCT-2000; 2000US-0241826.
PR 01-NOV-2000; 2000US-0244617.
PR 08-NOV-2000; 2000US-0246474.
PR 08-NOV-2000; 2000US-0246475.
PR 08-NOV-2000; 2000US-0246476.
PR 08-NOV-2000; 2000US-0246477.
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PR 08-NOV-2000; 2000US-0246524.
PR 08-NOV-2000; 2000US-0246525.
PR 08-NOV-2000; 2000US-0246526.
PR 08-NOV-2000; 2000US-0246527.
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PR 17-NOV-2000; 2000US-0249207.
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PR 17-NOV-2000; 2000US-0249299.
PR 17-NOV-2000; 2000US-0249300.
PR 01-DEC-2000; 2000US-0250160.
PR 01-DEC-2000; 2000US-0250391.
PR 05-DEC-2000; 2000US-0251030.
PR 05-DEC-2000; 2000US-0251988.
PR 05-DEC-2000; 2000US-0256719.
PR 06-DEC-2000; 2000US-0251479.
PR 08-DEC-2000; 2000US-0251856.
PR 08-DEC-2000; 2000US-0251868.
PR 08-DEC-2000; 2000US-0251869.
PR 08-DEC-2000; 2000US-0251989.
PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-488786/53.
DR P-PSDB; ABB10965.
XX

```
PT   New isolated ovarian and/or breast cancer related nucleic acids and
PT   polypeptides, useful for diagnosing, treating and/or preventing human
PT   diseases and disorders, particularly ovarian and/or breast cancer -
XX
PS   Claim 1; SEQ ID NO 233; 577pp + Sequence Listing; English.
XX
CC   The invention relates to novel genes (ABA07454-ABA08224) and proteins
CC   (ABB10743-ABB10980) useful for preventing, treating or ameliorating
CC   medical conditions e.g. by protein or gene therapy. The genes are
CC   isolated from a range of human tissues disclosed in the specification.
CC   The nucleic acids, proteins, antibodies and (ant)agonists are useful
CC   in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC   and ovarian cancer and other cancers of the adrenal gland, bone, bone
CC   marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC   (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC   haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC   disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC   colitis; (c) cardiovascular disorders such as myocardial ischaemias;
CC   (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC   epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC   and parasitic infections.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 699 BP; 202 A; 161 C; 120 G; 211 T; 5 other;

  Query Match             7.3%;  Score 72.8;  DB 22;  Length 699;
  Best Local Similarity   64.0%;  Pred. No. 2.1e-09;
  Matches  110;  Conservative    0;  Mismatches   62;  Indels    0;  Gaps    0;

Qy     260 TGGGTCCTAATCCAATCTAAGTGATGTCTCCATGAAAGAGGAAATAAGGATACAAATGTG 319
           |||  |||||||||||| | | ||   |||  ||    |   | || | | |    |  ||
Db      93 TGGACCCTAATCCAATATGACTGGCATCTTTATATGAAGAGGAAGAGGCACCAGAGGGTA 152

Qy     320 CACACAGAGAGAAATGGCCACATGAGGACACAATGAGAATGTGGCTACTTACAAGCCTAG 379
           |||||  ||||||| |||||  || |||||||  | |||    ||  |  |  ||||| ||
Db     153 CACACGCAGAGAAAAGGCCATGTGTGGACACAGTAAGATGACGGACATCTGTAAGCCAAG 212

Qy     380 GAGAGAGGCCTCCGAGAAAACACACCCTACCCACACCTTGATGTTGGACTTC 431
           ||| ||  |||| ||  ||||   || | ||  ||||||||| ||||  ||
Db     213 GAGGGAAACCTCAGAAGAAACCAGCCTTGCCTGCACCTTGATCTTGGAGGTC 264


RESULT 11
AAL02590
ID   AAL02590 standard; cDNA; 699 BP.
XX
AC   AAL02590;
XX
DT   21-NOV-2001  (first entry)
XX
DE   Human reproductive system related antigen cDNA SEQ ID NO: 2591.
XX
KW   Human; reproductive system related antigen; reproductive system disorder;
KW   cancer; gene therapy; ss.
XX
OS   Homo sapiens.
XX
PN   WO200155320-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01339.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
PR   19-MAY-2000; 2000US-0205515.
PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
PR   30-JUN-2000; 2000US-0215135.
PR   07-JUL-2000; 2000US-0216647.
PR   07-JUL-2000; 2000US-0216880.
PR   11-JUL-2000; 2000US-0217487.
PR   11-JUL-2000; 2000US-0217496.
PR   14-JUL-2000; 2000US-0218290.
PR   26-JUL-2000; 2000US-0220963.
PR   26-JUL-2000; 2000US-0220964.
PR   14-AUG-2000; 2000US-0224518.
PR   14-AUG-2000; 2000US-0224519.
PR   14-AUG-2000; 2000US-0225213.
PR   14-AUG-2000; 2000US-0225214.
PR   14-AUG-2000; 2000US-0225266.
PR   14-AUG-2000; 2000US-0225267.
PR   14-AUG-2000; 2000US-0225268.
PR   14-AUG-2000; 2000US-0225270.
PR   14-AUG-2000; 2000US-0225447.
PR   14-AUG-2000; 2000US-0225757.
PR   14-AUG-2000; 2000US-0225758.
PR   14-AUG-2000; 2000US-0225759.
PR   18-AUG-2000; 2000US-0226279.
PR   22-AUG-2000; 2000US-0226681.
PR   22-AUG-2000; 2000US-0226868.
PR   22-AUG-2000; 2000US-0227182.
PR   23-AUG-2000; 2000US-0227009.
PR   30-AUG-2000; 2000US-0228924.
PR   01-SEP-2000; 2000US-0229287.
PR   01-SEP-2000; 2000US-0229343.
PR   01-SEP-2000; 2000US-0229344.
PR   01-SEP-2000; 2000US-0229345.
PR   05-SEP-2000; 2000US-0229509.
PR   05-SEP-2000; 2000US-0229513.
PR   06-SEP-2000; 2000US-0230437.
PR   06-SEP-2000; 2000US-0230438.
PR   08-SEP-2000; 2000US-0231242.
PR   08-SEP-2000; 2000US-0231243.
PR   08-SEP-2000; 2000US-0231244.
PR   08-SEP-2000; 2000US-0231413.
PR   08-SEP-2000; 2000US-0231414.
PR   08-SEP-2000; 2000US-0232080.
PR   08-SEP-2000; 2000US-0232081.
PR   12-SEP-2000; 2000US-0231968.
PR   14-SEP-2000; 2000US-0232397.
PR   14-SEP-2000; 2000US-0232398.
PR   14-SEP-2000; 2000US-0232399.
PR   14-SEP-2000; 2000US-0232400.
PR   14-SEP-2000; 2000US-0232401.
PR   14-SEP-2000; 2000US-0233063.
PR   14-SEP-2000; 2000US-0233064.
PR   14-SEP-2000; 2000US-0233065.
PR   21-SEP-2000; 2000US-0234223.
PR   21-SEP-2000; 2000US-0234274.
PR   25-SEP-2000; 2000US-0234997.
PR   25-SEP-2000; 2000US-0234998.
PR   26-SEP-2000; 2000US-0235484.
PR   27-SEP-2000; 2000US-0235834.
PR   27-SEP-2000; 2000US-0235836.
PR   29-SEP-2000; 2000US-0236327.
PR   29-SEP-2000; 2000US-0236367.
PR   29-SEP-2000; 2000US-0236368.
PR   29-SEP-2000; 2000US-0236369.
PR   29-SEP-2000; 2000US-0236370.
PR   02-OCT-2000; 2000US-0236802.
PR   02-OCT-2000; 2000US-0237037.
PR   02-OCT-2000; 2000US-0237038.
PR   02-OCT-2000; 2000US-0237039.
PR   02-OCT-2000; 2000US-0237040.
PR   13-OCT-2000; 2000US-0239935.
PR   13-OCT-2000; 2000US-0239937.
PR   20-OCT-2000; 2000US-0240960.
PR   20-OCT-2000; 2000US-0241221.
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PR   20-OCT-2000; 2000US-0241785.
PR   20-OCT-2000; 2000US-0241786.
PR   20-OCT-2000; 2000US-0241787.
PR   20-OCT-2000; 2000US-0241808.
PR   20-OCT-2000; 2000US-0241809.
PR   20-OCT-2000; 2000US-0241826.
PR   01-NOV-2000; 2000US-0244617.
PR   08-NOV-2000; 2000US-0246474.
PR   08-NOV-2000; 2000US-0246475.
PR   08-NOV-2000; 2000US-0246476.
PR   08-NOV-2000; 2000US-0246477.
PR   08-NOV-2000; 2000US-0246478.
PR   08-NOV-2000; 2000US-0246523.
PR   08-NOV-2000; 2000US-0246524.
PR   08-NOV-2000; 2000US-0246525.
PR   08-NOV-2000; 2000US-0246526.
PR   08-NOV-2000; 2000US-0246527.
PR   08-NOV-2000; 2000US-0246528.
PR   08-NOV-2000; 2000US-0246532.
PR   08-NOV-2000; 2000US-0246609.
PR   08-NOV-2000; 2000US-0246610.
PR   08-NOV-2000; 2000US-0246611.
PR   08-NOV-2000; 2000US-0246613.
PR   17-NOV-2000; 2000US-0249207.
PR   17-NOV-2000; 2000US-0249208.
PR   17-NOV-2000; 2000US-0249209.
PR   17-NOV-2000; 2000US-0249210.
PR   17-NOV-2000; 2000US-0249211.
PR   17-NOV-2000; 2000US-0249212.
PR   17-NOV-2000; 2000US-0249213.
PR   17-NOV-2000; 2000US-0249214.
PR   17-NOV-2000; 2000US-0249215.
PR   17-NOV-2000; 2000US-0249216.
PR   17-NOV-2000; 2000US-0249217.
PR   17-NOV-2000; 2000US-0249218.
PR   17-NOV-2000; 2000US-0249244.
PR   17-NOV-2000; 2000US-0249245.
PR   17-NOV-2000; 2000US-0249264.
PR   17-NOV-2000; 2000US-0249265.
PR   17-NOV-2000; 2000US-0249297.
PR   17-NOV-2000; 2000US-0249299.
PR   17-NOV-2000; 2000US-0249300.
PR   01-DEC-2000; 2000US-0250160.
PR   01-DEC-2000; 2000US-0250391.
PR   05-DEC-2000; 2000US-0251030.
PR   05-DEC-2000; 2000US-0251988.
PR   05-DEC-2000; 2000US-0256719.
PR   06-DEC-2000; 2000US-0251479.
PR   08-DEC-2000; 2000US-0251856.
PR   08-DEC-2000; 2000US-0251868.
PR   08-DEC-2000; 2000US-0251869.
PR   08-DEC-2000; 2000US-0251989.
PR   08-DEC-2000; 2000US-0251990.
PR   11-DEC-2000; 2000US-0254097.
PR   05-JAN-2001; 2001US-0259678.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-465570/50.
DR   P-PSDB; AAM96620.
XX
PT   Isolated nucleic acid molecule encoding a reproductive system antigen
PT   is used in preventing, treating or ameliorating a medical condition  -
XX
PS   Claim 1; SEQ ID NO 2591; 1297pp + Sequence Listing; English.
XX
CC   The present invention provides the protein and coding sequences of a
CC   number of human reproductive system related antigens. These can be used
CC   in the prevention and treatment of reproductive system disorders,
CC   including cancer. The present sequence is a coding sequence of the
CC   invention.
XX
SQ   Sequence 699 BP; 202 A; 161 C; 120 G; 211 T; 5 other;

  Query Match             7.3%;  Score 72.8;  DB 22;  Length 699;
  Best Local Similarity   64.0%;  Pred. No. 2.1e-09;
  Matches  110;  Conservative    0;  Mismatches   62;  Indels    0;  Gaps    0;

Qy    260 TGGGTCCTAATCCAATCTAAGTGATGTCTCCATGAAAGAGGAAATAAGGATACAAATGTG 319
          |||  |||||||||||| | | ||   |||  ||   |   | || | | |    |  ||
Db     93 TGGACCCTAATCCAATATGACTGGCATCTTTATATGAAGAGGAAGAGGCACCAGAGGGTA 152

Qy    320 CACACAGAGAGAAATGGCCACATGAGGACACAATGAGAATGTGGCTACTTACAAGCCTAG 379
          |||||  |||||||| |||||  || |||||||  | |||    ||  |  |  ||||| ||
Db    153 CACACGCAGAGAAAAGGCCATGTGTGGACACAGTAAGATGACGGACATCTGTAAGCCAAG 212

Qy    380 GAGAGAGGCCTCCGAGAAAACACACCCTACCCACACCTTGATGTTGGACTTC 431
          ||| ||  |||| ||  ||||   || | ||  |||||||||| |||||  ||
Db    213 GAGGGAAACCTCAGAAGAAACCAGCCTTGCCTGCACCTTGATCTTGGAGGTC 264


RESULT 12
AAK94192/c
ID   AAK94192 standard; cDNA; 2079 BP.
XX
AC   AAK94192;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human full-length cDNA, SEQ ID NO: 2745.
XX
KW   Human; full length cDNA; cDNA synthesis; oligo-capping; ss.
XX
OS   Homo sapiens.
XX
PN   EP1130094-A2.
XX
PD   05-SEP-2001.
XX
PF   07-JUL-2000; 2000EP-0114089.
XX
PR   08-JUL-1999;   99JP-0194486.
PR   11-JAN-2000; 2000JP-0118774.
PR   02-MAY-2000; 2000JP-0183765.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Nishikawa T,  Isogai T,  Hayashi K,  Ishii S,  Kawai Y;
PI   Wakamatsu A,  Sugiyama T,  Nagai K,  Kojima S,  Otsuki T,  Koga H;
XX
DR   WPI; 2001-524255/58.
DR   P-PSDB; AAM93275.
XX
PT   830 Primers useful for synthesizing full length cDNA clones and their
PT   use in genetic manipulation -
XX
PS   Claim 8; SEQ ID NO 2745; 1380pp + sequence listing; English.
XX
CC   The invention relates to primers for synthesising full length cDNA
CC   clones. 830 cDNA molecules encoding a human protein have been
CC   isolated and nucleotide sequences of 5'- and 3'-ends of the cDNA
CC   molecules have been determined. Primers for synthesising the full length
CC   cDNA are useful for clarifying the function of the protein encoded by
CC   the cDNA. The full length clones were obtained by construction of full
CC   length enriched cDNA libraries that were synthesised by the oligo-capping
CC   method. The primers enable the production of the full length cDNA easily
CC   without any special methods. The present sequence is a full length
CC   human cDNA of the invention.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in CD-ROM format directly from EPO.
XX
SQ   Sequence 2079 BP; 500 A; 552 C; 459 G; 568 T; 0 other;

  Query Match             7.3%;  Score 72.6;  DB 22;  Length 2079;
```

```
  Best Local Similarity   71.5%;  Pred. No. 3.6e-09;
  Matches  138;  Conservative    0;  Mismatches   49;  Indels    6;  Gaps    3;

Qy    240 TTAAAATGAGGACCTTAGGGTGGGTCCTAATCCAATCTAAGTGATGTCTCCATGA-AAGA 298
          ||| |||| |  | |||||||||| |||||||| | |   || || ||  || | | ||
Db    765 TTATAATGGGACCATTAGGGTGGGCCCTAATCCAGTATGGCTGGTGCCTTTATAAGAGGA 706

Qy    299 GGAAATAAGGATACAAATGTGCACACAGAGAGAAATGGCCACATGAGGACACAATGAGAA 358
          ||| || | || ||| |    |||||| |||| ||| |||  |||||||||   |  |
Db    705 GGAGATTAAGACACAGA----CACACACAGAGGGATGACCATGTGAGGACACAGGCAACA 650

Qy    359 TGTGGCTACTTACAAGCCTAGGAGAGAGGCCTCCGAGAAAACACACCCTACCCACACCTT 418
            |||| | || |||||| |  |||||||||| ||  ||||   |||| |  |||||||
Db    649 GATGGC-ATTTGCAAGCCAAATAGAGAGGCCTCAGAAGAAACCAGCCCTGCTGACACCTT 591

Qy    419 GATGTTGGACTTC 431
          |||||||||||||
Db    590 GATGTTGGACTTC 578


RESULT 13
ABN60912
ID   ABN60912 standard; cDNA; 592 BP.
XX
AC   ABN60912;
XX
DT   28-JUN-2002  (first entry)
XX
DE   Human cancer related polynucleotide SEQ ID NO 879.
XX
KW   Human; cytostatic; gene expression; gene mapping; tissue profiling;
KW   gene therapy; cancer; tumour; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200214500-A2.
XX
PD   21-FEB-2002.
XX
PF   16-AUG-2001; 2001WO-US25840.
XX
PR   16-AUG-2000; 2000US-226326P.
XX
PA   (CHIR ) CHIRON CORP.
PA   (HYSE-) HYSEQ INC.
XX
PI   Escobedo J,  Garcia PD,  Sudduth-Klinger J,  Reinhard C,  Randazzo F;
PI   Lamson G,  Scott EM,  Zhang G,  Kassam A,  Pot D,  Labat I;
XX
DR   WPI; 2002-241905/29.
XX
PT   New nucleic acid for producing a polypeptide, detecting differentially
PT   expressed genes correlated with a cancerous state of a mammalian cell,
PT   and inhibiting tumor growth -
XX
PS   Claim 1; SEQ ID NO 879; 883pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated polynucleotide (ABN27253-ABN33262)
CC   with cytostatic activity. The polynucleotide is used to produce a
CC   polypeptide, to detect differentially expressed genes correlated with a
CC   cancerous state of a mammalian cell and to inhibit tumour growth. The
CC   polynucleotide is used as a probe in mapping and tissue profiling. The
CC   encoded polypeptide and antibodies to the polypeptide can also be used
CC   for therapeutic and diagnostic purposes. The polynucleotide is useful for
CC   gene therapy.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 592 BP; 179 A; 92 C; 120 G; 201 T; 0 other;

  Query Match             7.2%;  Score 72.4;  DB 24;  Length 592;
  Best Local Similarity   71.7%;  Pred. No. 2.5e-09;

  Matches  142;  Conservative    0;  Mismatches   41;  Indels   15;  Gaps    3;

Qy     10 AGTTAGGAAGAATAAGTGCAAGAGATCTATTGTACTT---GGTGACTACAGTT------A 60
          || || ||  ||| ||| ||||| ||||||||| | |   ||||||| | ||      |
Db    392 AGATAAGAGCAATTAGTTCAAGAAATCTATTGTGCATCACGGTGACTATAATTAATAACA 451

Qy     61 ATGTATTGTGTTCTTGA------CTAATACAGTAGATTTCGAGTGTTCTCACAACAAAAA 114
          || |||||| | |||||      | || | ||| |||||  |||| | | || ||| |||
Db    452 ATATATTGTATACTTGAAAATTTCCAAGAGAGTGGATTTTAAGTGGTTTTACCACACAAA 511

Qy    115 CATGATGGGTATGTGAGGTAATGCATATGCAAACTAGCTTGGGTTAACCATTCCACAATA 174
          |||||  |||||||||||||||||||||| || |||||||  ||| ||||||||  |||
Db    512 TATGATAAGTATGTGAGGTAATGCATATGCTAATTAGCTTGATTTAGCCATTCCATGATA 571

Qy    175 TGTGTGTATTTCAAAACA 192
          | |   | | ||||||||
Db    572 TATACATGTATCAAAACA 589


RESULT 14
AAF21343
ID   AAF21343 standard; DNA; 14968 BP.
XX
AC   AAF21343;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human low adenosine antisense oligonucleotide related sequence #2910.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US08020.
XX
PR   06-APR-1999;   99US-0127958.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not
PT   trigger adenosine receptors during metabolism, useful e.g. for treating
PT   cancers and respiratory obstructions -
XX
PS   Disclosure; Page 1345-1348; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
```

CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
CC and/or surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention.
XX
SQ Sequence 14968 BP; 5108 A; 2436 C; 2758 G; 4666 T; 0 other;

Query Match 7.2%; Score 72.4; DB 21; Length 14968;
Best Local Similarity 65.1%; Pred. No. 9.1e-09;
Matches 125; Conservative 0; Mismatches 61; Indels 6; Gaps 1;

```
Qy    240 TTAAAATGAGGACCTTAGGGTGGGTCCTAATCCAATCTAAGTGATGTCTCCATGAAAGAG 299
          ||||||||||| | | ||||  ||||||| | |||| | | || | |||  |  |||
Db   6085 TTAAAATGAGGTCATGAGGGCAGGTCCTACTGCAATATGACTGGTATCTTTAGAAAAACA 6144

Qy    300 GAAATAAGGATACAAATGTGCACACAGAGAGAAATGGCCACATGAGGACACAATGAGAAT 359
          || |   | ||| |       |||||||| | |   |||  ||| ||||   |||||
Db   6145 GATAAGGGTATAGAT------ACACAGAGATAGAAAACCATGTGAAGACACTGGGAGAAA 6198

Qy    360 GTGGCTACTTACAAGCCTAGGAGAGAGGCCTCCGAGAAAACACACCCTACCCACACCTTG 419
           |||| || || ||||| ||||| |||| |||| |  ||||  || || |    ||| ||
Db   6199 ATGGCCACCTATAAGCCAAGGAGGGAGGACTCCAAAGAAACCAACACTGCTGGTACCCTG 6258

Qy    420 ATGTTGGACTTC 431
          || |  ||| ||
Db   6259 ATTTCAGACCTC 6270
```

RESULT 15
AAA35221
ID AAA35221 standard; DNA; 14968 BP.
XX
AC AAA35221;
XX
DT 28-JUL-2000 (first entry)
XX
DE Human adenosine receptor related polynucleotide 2nd SEQ ID NO:95.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US17712.
XX
PR 03-AUG-1998; 98US-0095212.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PT New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers -
XX
PS Disclosure; Page 1260-1264; 1343pp; English.
XX
CC The present invention describes a new composition comprising an
CC antisense oligonucleotide (ON) with low adenosine (up to 15%), which
CC targets nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
CC asthma, impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of
CC the ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last
CC 185 sequences are also called SEQ ID NO:1 to 185, but the sequences
CC differ from the previously named sequences. SEQ ID NO:11 to 1680
CC (AAA32323 to AAA33992) are specifically claimed ONs from the present
CC invention. N.B. Sequences given in the disclosure of the present
CC invention do not match up with their corresponding SEQ ID NO: sequences
CC given in the sequence listing.
XX
SQ Sequence 14968 BP; 5109 A; 2436 C; 2757 G; 4666 T; 0 other;

Query Match 7.2%; Score 72.4; DB 21; Length 14968;
Best Local Similarity 65.1%; Pred. No. 9.1e-09;
Matches 125; Conservative 0; Mismatches 61; Indels 6; Gaps 1;

```
Qy    240 TTAAAATGAGGACCTTAGGGTGGGTCCTAATCCAATCTAAGTGATGTCTCCATGAAAGAG 299
          ||||||||||| | | ||||  ||||||| | |||| | | || | |||  |  |||
Db   6085 TTAAAATGAGGTCATGAGGGCAGGTCCTACTGCAATATGACTGGTATCTTTAGAAAAACA 6144

Qy    300 GAAATAAGGATACAAATGTGCACACAGAGAGAAATGGCCACATGAGGACACAATGAGAAT 359
          || |   | ||| |       |||||||| | |   |||  ||| ||||   |||||
Db   6145 GATAAGGGTATAGAT------ACACAGAGATAGAAAACCATGTGAAGACACTGGGAGAAA 6198

Qy    360 GTGGCTACTTACAAGCCTAGGAGAGAGGCCTCCGAGAAAACACACCCTACCCACACCTTG 419
           |||| || || ||||| ||||| |||| |||| |  ||||  || || |    ||| ||
Db   6199 ATGGCCACCTATAAGCCAAGGAGGGAGGACTCCAAAGAAACCAACACTGCTGGTACCCTG 6258

Qy    420 ATGTTGGACTTC 431
          || |  ||| ||
Db   6259 ATTTCAGACCTC 6270
```

Search completed: December 24, 2002, 17:11:02
Job time : 841.952 secs